THE IMPACT OF LEASES ON FINANCIAL ANALYSIS

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ABSTRACT

THE IMPACT OF LEASES ON FINANCIAL ANALYSIS

by Andrew Thomas Nelson

Leasing has experienced a tremendous growth in recent years. This growth has been accompanied by a fundamental change in the nature of the lease transaction. It is no longer solely a means of obtaining services but is now also an important means of financing.

The advent of the "financial" lease has given rise to some very important accounting problems, the solution of which will have a profound effect on the entire business world. These problems hinge on current reporting practices which provide for disclosure of leases in the body of the financial statements only to the extent that the rentals have been paid or accrued. As a result of this practice, assets which are obtained through lease financing are omitted from the lessee's balance sheet. Likewise, the liabilities which give rise to these assets are not shown in the financial statements. While this practice is probably adequate for "service" leases, it ignores the economic and financial fact that "financial" leases are in reality means of financing which are similar to conventional debt.

A number of proposals for correcting these deficiencies have already been made. The purpose of this thesis is to determine the impact that the various proposals for reporting leases have upon conventional financial analysis. An answer to this problem is necessary in order to evaluate fairly the available alternatives.

The study is divided into five phases. First, the advantages and disadvantages of leasing are reviewed in order to expose artificial advantages and determine the extent to which accounting has contributed to their existence. Second, the extent and nature of current financial statement reporting is examined in order to gain an understanding of the underlying problem. Third, the proposed changes in financial statement reporting are examined with special attention being directed to the capitalization proposal. Fourth, the leases of eleven corporations are capitalized and the financial statements reconstructed to reflect these amounts. Finally, fifteen different financial ratios are computed for each of the eleven lessee firms both before and after capitalization. An evaluation is then made of each of these ratios to determine whether or not they are improved by capitalization.

Major findings of the study include:

1. Current techniques for reporting of "financial" leases are not adequate in that they fail to recognize important financial and economic facts.

2. Current reporting does not provide sufficient detail to enable the financial analyst accurately to capitalize leases.

3. Much of the case presented in favor of leasing rests upon "illusory" arguments which are based upon faulty reporting techniques.

4. Capitalization of lease rentals with the amounts included in the balance sheet totals is the only proposal examined that can satisfactorily overcome the deficiencies in current reporting.

5. Capitalization is deeply rooted in accounting theory and completely compatible with current principles of accounting.

6. Most of the ratios affected by leasing are made more meaningful by capitalization. In fact, ratios that are computed from conventional

financial statements are misleading and may result in faulty decisions.

7. Through capitalization most of the financial ratios analyzed will make a lessee firm's weak financial position apparent whereas without capitalization this fact may remain concealed.

THE IMPACT OF LEASES ON FINANCIAL ANALYSIS

By

Andrew Thomas Nelson

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CHAPTER I

THE IMPACT OF LEASES ON FINANCIAL ANALYSIS

Significance of the Problem

Leasing is not a modern day innovation. In fact, the practice actually dates back for hundreds of years before Christ.[1] For centuries the lease was used almost exclusively in connection with agricultural land. It was a tool which enabled the ruling class to retain control of vast estates, benefit from the land's production, and yet be freed from the problems associated with the actual farming operations. With the coming of the industrial revolution and the urbanization movement which accompanied it, the lease was extended beyond its initial bounds. Many of the commercial buildings constructed during this period of early urban development were built on land which was made available under long-term leases. Even in the cities, however, the lease was confined primarily to transactions involving land and represented a rather insignificant part of our economy.

Today leasing is growing at an accelerated pace and is pervading all facets of the American economy as an alternative to purchasing. Indeed, today it is difficult to find a capital good which is not available through leasing should the customer desire it.[2] This growth has been

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[1]Stanley L. McMichael and Paul T. O'Keefe, Leases--Percentage, Short and Long-Term (5th ed.; Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959), p. 1.

[2]It has been reported recently, for example, that many large companies are now leasing tires and tubes for their fleets of company cars. See Fred J. Busko, "Leased Tires Inventory," N.A.A. Bulletin, Vol. XLI (October, 1959), p. 24.

accompanied by a fundamental change in the nature of the lease transaction. It is no longer solely a means of acquiring property which is not available by other legal means but has now become an important means of financing. The present study then is prompted by two factors: first, the accelerated growth in leasing which is making this a subject of widespread interest to virtually every segment of the economy; and second, the changing nature of the lease transaction.

The Problem Defined

In spite of these very significant changes in the nature and importance of leasing, the accounting profession has continued to record and report these transactions in the traditional manner. Conventional accounting has provided for the recognition of lease rentals only to the extent that they have been paid or accrued. As a result of this practice, the assets used by companies which have been obtained through lease financing have been omitted from their balance sheets. Likewise, the liabilities which have given rise to the funds necessary to obtain the use of these assets have not been shown in the financial statements.

A great deal has already been written on the subject of accounting for long-term leases. This thesis is directed at one major problem which as yet remains unanswered: What impact would the various proposals for reporting leases have upon conventional financial analysis? After all, we must have an understanding of the impact of any proposal before we can attempt to reach a decision on its merits. The question of impact naturally raises some other important questions to which a portion of this study will be directed, such as:

1. What are the various types of leases?
2. How are each of these types reported under current practices?
3. What types of leases require different treatment than is currently being provided?

4. What are the alternatives to current methods?
5. Which of these methods would produce the most meaningful results from the standpoint of financial analysis?
6. Have reporting practices contributed to "illusions" which have resulted in the misuse of lease financing?

Scope of the Study

A number of limitations in the scope of the study have been made in order to bound the problem in workable form and to bring the study within reasonable limits.

First of all, the present study is limited to problems associated with lessee firms. No attempt has been made specifically to determine the possible impact that these proposals might have on the lessors.

Second, the study is limited to long-term leases. The meaning of "long-term leases," of course, varies with one's time perspective. One writer has defined them as leases which extend for "twenty-one years or more."[1] On the other hand, the American Institute of Certified Public Accountants has used the expression "long-term leases" to cover those leases which extend beyond three years.[2] This latter meaning is the one used here, although this is strictly an arbitrary decision.

Third, in appraising the impact upon financial analysis we will be primarily concerned with the financial ratios. Obviously there are other important means of financial analysis. However, each of the commonly used ratios directs attention to the firm's financial statements. Since the ratios themselves are computed from the financial statements,

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[1]McMichael and O'Keefe, op. cit., p. 92.

[2]American Institute of Certified Public Accountants, Accounting Research and Terminology Bulletins. (Final edition; New York: American Institute of Certified Public Accountants, 1961), p. 126.

any study which measures the impact of a factor (in this case, long-term leasing) on financial ratios will to a large extent measure the impact on the underlying financial statements.

Fourth, the study is confined to an examination of the problems associated with leasing and does not cover the broader problem of accounting for other contractual commitments; such as, contracts for the purchase of materials or employment contracts.

Additional restrictions will be placed on the study because of the limited data available. These will be discussed later in the thesis as the problems which give rise to these additional restrictions are presented. None of the limitations in the scope of this study is meant to imply that all matters of significance lie within the problem area. Nor are they intended to imply that the conclusions reached have no application to areas excluded from this study. On the contrary, it is hoped that this thesis will stimulate further investigation into other important areas and that the conclusions reached here may have broader application than to this specific problem.

Approach to the Problem

A background to the problem of accounting for long-term leases is presented in Chapter II. First of all, the two factors which make this problem one of major importance are discussed; namely, the growth of leasing and the changing nature of the lease transaction. This is followed by a presentation of the advantages and disadvantages of leasing, an attempt being made to expose and point up artificial advantages and determine the extent to which accounting has contributed to their existence.

The purpose of Chapter III is to gain an understanding of current techniques so that they may be evaluated in light of other alternatives.

The current reporting techniques are examined in connection with the requirements for reporting that have been established by the American Institute of Certified Public Accountants and the Securities and Exchange Commission. Deficiencies in current reporting are then analyzed in an attempt to determine the causes of these inadequacies. The final section of this chapter is devoted to the rationale behind current practices.

The proposed changes in financial statement reporting are examined in Chapter IV. The first topic of discussion is the three major proposals for revising current reporting: through a supplementary schedule, through capitalization with the amounts shown short, or through capitalization with the amounts included in the totals. After discarding the first two proposals, attention is focused on the last one. The rationale behind the capitalization proposal as it has evolved from accounting theory is discussed next. The final section of this chapter will be centered around the capitalization controversy and the development of capitalization.

The methodology followed in the analysis of capitalization and current reporting is presented in Chapter V. The method by which the companies which were analyzed were selected, the determination of the rental schedules used, the selection of the appropriate rate of interest, and other problems associated with capitalization are presented.

In Chapter VI the impact of capitalization on conventional financial ratios is appraised. To begin with, the limitations of financial analysis are discussed. This is followed by a brief discussion of the objectives of each ratio selected for analysis. The ratios before and after capitalization are presented next, and an attempt is made to determine which way the ratios come nearest to meeting their objectives.

The findings of the study are summarized and the conclusions presented in the final chapter.

CHAPTER II

BACKGROUND

The Growth of Leasing

It is difficult to estimate the volume of lease transactions because there is no central organization which gathers data from the wide variety of firms engaged in the leasing business. However, a person can get some idea of the rate at which leasing is growing by taking a look at the capital equipment under lease. It has been estimated that in 1953 the total amount of capital equipment under lease was about $450 million and that by 1958 the amount had grown to about $1.5 billion.[1] This means that capital equipment leasing grew over 300 per cent during this five-year period. There are indications that leasing may grow at an even faster rate in the future.

Leasing has also grown rapidly in the real estate field. The type of transaction which has probably accounted for the largest part of this growth has been the sale-and-lease-back agreement. This type of transaction is usually designed so that the user of the property either purchases or constructs the asset to its own specifications and needs. Upon completion of construction, the asset is sold to a second party under an agreement which provides for the lease of the property back to the party desiring its use.

Although the sale-and-lease-back transaction is probably not new, it has only come into wide usage since the second world war. The first

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[1]Francis T. Knouss, "You Can Rent It--But Should You?" N.A.A. Bulletin, Vol. XLI (October, 1959), p. 80.

important sale-and-lease-back agreement was executed in 1936 by the Safeway Stores.[1] Since that time Safeway has continued to use the lease as a primary tool for expansion. In its 1960 annual report the company reported 2,904 property leases with minimum annual rentals of approximately $43 million.[2]

Since the second world war, the sale-and-lease-back transaction has increased in frequency and magnitude. For example, in a single transaction which occurred in 1945, the Allied Stores Corporation sold land, buildings and equipment valued at approximately $16 million (net of depreciation) to the Real Property Corporation.[3] This sale was accompanied by an agreement which provided for the lease of all of the properties back to Allied or its subsidiaries for a thirty-year period with annual rentals totaling over $26 million. Many other companies have since made use of this type of transaction.

The leasing of real estate is particularly significant in the retail merchandising and grocery fields. Many retail stores of the large chains are occupied under long-term lease agreements. At January 31, 1961, Sears, Roebuck and Company reported "a number" of long-term leases with minimum fixed rentals of $23,417,000 per year.[4] F. W. Woolworth Company reported at December 31, 1960, minimum annual rentals for leased property of approximately $44,300,000.[5] At February 1, 1961, the Montgomery Ward and Company, Inc.,

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[1]Albert H. Cohen, Long-term Leases: Problems of Taxation, Finance and Accounting (Ann Arbor, Michigan: University of Michigan Press, 1954), p. 22.

[2]Safeway Stores, Inc., Annual Report, December 31, 1960, p. 18.

[3]Cohen, op. cit., p. 25.

[4]Sears, Roebuck and Company, Annual Report, January 31, 1961, p. 27.

[5]F. W. Woolworth and Company, Annual Report, December 31, 1960, p. 27.

reported 667 long-term leases with aggregate minimum rentals of over $11 million per year.[1]

Types of Leases

As with other forms of contracts, the lease can be "tailor-made" to meet the needs of the parties involved. For this reason, leases vary greatly with respect to term, duties of various parties, restrictions, alternatives at termination, method of payment, flexibility, and purpose. With this wide array of provisions many methods of classification are potentially available. One which seems particularly appropriate to this study is a method which has been suggested by Professor John H. Myers which classifies leases according to their fundamental purpose. Professor Myers has indicated that leases are generally of two types.[2] The first of these may be designated as a service lease. It is entered into solely for the services to be rendered, these services being provided by the lessor over the term of the agreement.

The other major type of lease has financing as its fundamental objective and for this reason may be designated as a financial lease. Under the financial lease, the lessor provides all of the service which is required of him at the beginning of the contract. From then on he simply sits back and collects the rent while the lessee is given "quiet enjoyment" of the property. The lessor is not called upon to render service over the period of the agreement. An example of this type of

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[1]Montgomery Ward and Company, Inc., Annual Report, February 1, 1961, p. 11.

[2]An address given by Professor John H. Myers at the technical session "Progress in Accounting Research" at the 74th Annual Meeting of the American Institute of Certified Public Accountants, Monday, October 30, 1961, at McCormick Place, Chicago.

contract is a typical sale-and-lease-back agreement.

Under both types of lease, the lessee customarily utilizes the service over the entire life of the agreement. The distinction between the two cannot be made on the basis of when the lessee receives the benefits from the contract; rather it must be made on the basis of when the lessor fulfills his part of the agreement. Where the lessor is called upon to render this service throughout the duration of the lease, the arrangement may be termed a service lease. On the other hand, when the lessor is called upon to provide funds and perform other duties at the beginning of the lease and where the contract is essentially "performed" from the standpoint of the lessor, the agreement is termed a financial lease.

Many leases are probably neither wholly financial nor entirely service leases but rather are hybrids instead. Professor Myers has suggested that the rentals payable under each such lease be separated into service and finance components. He has noted that this task would be no more complex than other joint cost problems currently faced by the accountant and has suggested five possible criteria for making the separation:

1. Does the agreement use up part of the firm's "pool" of credit?
2. Who bears the rewards and risks of ownership?
3. Was the decision to lease based upon financial or operational considerations?
4. Does the lessor rely primarily upon the general credit of the lessee?
5. Is it customary to lease this type of property?[1]

It is not within the scope of this study to determine whether or not all leases can be properly divided into their financial and service components. It will be assumed here that such a distinction is possible.

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[1]Myers address, op. cit.

To the extent that this assumption is not valid, the application of the findings contained herein will be limited.

The service lease presents no serious accounting problems. Under this type of contract, the rentals are recorded only to the extent that they are paid or accrued. The lessee has no asset under this type of agreement except insofar as the rents are prepaid. Nor does he have any liability except to the extent that services have been received but have not yet been paid for. An example of such a contract is the lease of telephone service.

The financial lease, on the other hand, presents some very serious accounting problems to which the remainder of this study will be devoted.

The Financial Lease

In order to gain a better understanding of the nature of the problems, it is necessary to examine the financial lease more closely. Some of its more common characteristics are as follows:

(1) The decision to lease is based primarily on financial considerations rather than on strictly operational reasons: i.e., leasing is considered as a source of capital by management. This method is selected after giving consideration to other forms of financing such as issuing capital stock, retention of earnings, or borrowing through bank term loans or mortgage bonds.

(2) The lease is normally noncancellable, or is cancellable only under heavy penalty, during the initial term of the lease.

(3) The rentals payable under the lease agreement are designed so as to return to the lessor the total cost of the asset involved plus a return on the invested funds during the initial term of the lease.[1]

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[1]In many financial leases the rentals are not fixed but are based upon a certain percentage of the gross sales or profits of the lessee from the property. Such leases are usually termed "percentage" leases and

(4) The lessor--the legal owner of the asset--retains title to the property involved at the expiration of the initial lease term. However, provision is often made for the lessee to obtain use of the property after this date by the lessor granting to the lessee either an option to renew the lease at reduced rates or an option to buy the property.[1] In either case, the lessee must make additional payments (above and beyond the asset cost plus a reasonable return thereon) in order to have continued use of the property.

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normally provide for a fixed minimum rental which is required to be paid regardless of the level of sales or profits. In these cases the guaranteed or minimum rentals are designed so as to return to the lessor the total cost of the asset involved plus a fixed return on the invested funds. The "premium" rentals resulting from the percentage clause would represent additional return to the lessor, above and beyond his investment.

[1]There is some danger of losing certain tax advantages by including a purchase option in the lease agreement. However, it appears that the purchase option will generally not jeopardize the deductibility of the rental payments provided the purchase price reasonably approximates the fair market value of the property at the date of purchase. Prentice-Hall sets forth the following guides for distinguishing a lease from a sale for tax purposes:

> "No general rule can be given, and each case must be decided on its own facts. However, generally, in the absence of evidence of a true rental, agreements for the lease of property will be treated as purchases and sales if one or more of the following conditions are present:
>
> (1) Portions of periodic payments apply specifically to an equity to be acquired by the "lessee".
>
> (2) "Lessee" will acquire title on payment of a stated amount of "rent" which must be paid in any event.
>
> (3) Total amount that "lessee" must pay for a relatively short period of use is very large compared with the amount needed to get transfer of title.
>
> (4) Periodic payments materially exceed current fair rental value.
>
> (5) Property may be purchased under an option at a price which is (a) nominal in relation to value of property at time option

(5) Financial leases often contain what is usually termed a "rejectable offer" clause. Under this provision the lessee may offer to purchase the leased asset at any time according to a schedule of predetermined prices. If the lessor rejects the offer of the lessee, the agreement is automatically canceled.

(6) Financial leases normally employ the "net lease" principle which requires the lessee to pay all maintenance costs, repairs, insurance, taxes, alterations, and all other costs (other than initial costs) normally associated with ownership. The purpose of this clause is to make the rental payments clear or "net" to the lessor so that the return he receives during the initial term of the lease is certain and determinable in advance.

(7) The primary security behind a financial lease is normally the general credit of the lessee rather than the value of the leased property. The following statement of policy by one of the nation's largest insurance companies indicates the importance of the general credit standing of the lessee in such transactions:

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may be exercised, or (b) relatively small compared with total required payments.

(6) Part of the "rent" is specifically designated interest, or is easily recognizable as the equivalent of interest.

(7) Total rental payments plus option price approximate price at which property could have been purchased plus interest and carrying charges."[1] [Numbered inserts are mine.]

[1]William F. Connelly, Robert B. Mitchell, and Stanley B. Tunick (eds.), Prentice-Hall 1962 Federal Tax Course (student edition; Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1961), p. 1837. For a discussion of tax aspects of leasing see: David Schaff, "When Is a Lease a Sale for Tax Purposes?" The Controller, Vol. XXVII (February, 1959), pp. 70-72, and Frank K. Greiesinger, "Equipment Leases Can Schedule Payments, and Deductions, to Avoid Tax Hazards," The Journal of Taxation, Vol. XIII (October, 1960), pp. 226-227.

> The first factor to be taken into consideration is the credit of the proposed tenant. The tenant should be a larger, well-known corporation of some national prominance to whom we would be willing to lend money on their unsecured debentures. Such matters are referred to our bond department for analysis and their recommendations.[1]

Financial leases are generally of two types. Under the first, the two-party lease, the company desiring to obtain the use of a particular asset (land, building or equipment) negotiates a lease directly with the owner. The latter party (the lessor) supplies the funds necessary to finance the transaction. The lessor may be either the manufacturer of the asset or a separate leasing company that has purchased the asset from the manufacturer for the purpose of negotiating the lease. The important fact is that the lessor assumes the financial burden.

The second type of financial lease, and probably by far the most common form, is the three-party lease agreement. This varies from the two-party lease primarily in that the funds are not provided by the lessor but are furnished by an outside financial institution. In this case there are three parties to the lease: the lessor, who owns the asset; the lessee, who obtains the use of the asset for a specified period of time; and the financial institution, which furnishes the funds necessary to finance the transaction. As in the case of the two-party lease, it is the general credit of the lessee corporation that is the major security behind the lease. The importance of this point is stressed by the following statement made by an insurance company executive:

> In the field of direct placements insurance companies are from time to time offered investments in the long-term debt obligations of corporations which have been organized as part of the financing transaction (or adapted therefor) and derive their borrowing capacity from leases to or contracts with other

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[1]As quoted by Albert H. Cohen, "The Future of Lease Financing under New Depreciation Rules," The Journal of Accountancy, Vol. XCVIII, (August, 1954), p. 190.

> corporations of established high credit standing. Although the borrower acquires valuable property as part of the financing transaction and is usually required to secure its obligation with a first mortgage on such property, the lender looks to the lease or contract with the high credit corporation as the principal security for its loan and relies upon the income provided to the borrower under the lease or contract for repayment of the loan.[1]

In a study of equipment manufacturers, Alvin J. Bytwork found a similar stress on the credit of lessee companies where the lease being negotiated was primarily of a financial nature. In a questionnaire which was sent to selected companies he asked: "If a customer's credit position was too poor for a financed sale, would you normally give him a: rental? rental purchase? finance lease recommendation?"[2]

In response to this question Bytwork found that while over half of the respondents would rent equipment to a firm with a weak financial position, less than three per cent would enter into a financial lease arrangement with the same firm.[3] This re-emphasizes the importance of a high credit standing as a prerequisite to a financial lease. While there may be many legal differences between the two-party and the three-party lease, financially speaking, they are the same. Both lean heavily on the general credit of the lessee corporation.

Advantages and Disadvantages of Leasing

There has been a great deal written both for and against leasing. While it is not the purpose of this study to evaluate the desirability of

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[1]Ralph L. Gustin, Jr., "Financing by Contract and by Lease--Some Considerations," paper read before the Association of Life Insurance Counsel at The Plaza, New York, Tuesday, December 10, 1957.

[2]Alvin Jay Bytwork, "The Effectiveness of Alternatives to Purchase in the Marketing of Construction Equipment Through Distributors," unpublished Ph. D. dissertation, Department of Marketing and Transportation Administration, Michigan State University, 1961, p. 126.

[3]Ibid.

leasing, it is nevertheless essential that we examine some of these arguments in order to determine the true nature of the transaction for which we are accounting. Many of the advantages of leasing are rather artificial and do not hold up after careful examination. They seem to be attempts to make leasing appear to be something that it is not--a cure-all for financial difficulties or a readily available substitute for financing. They tend to obscure the fact that leasing is a means of financing--nothing more or less.[1]

For purposes of discussion, the advantages of leasing may be classified into five groups as follows: first, advantages which are over-stressed; second, advantages of avoiding ownership; third, advantages in laws and regulations; fourth, advantages of financial leverage; and fifth, advantages of improved financial position.

Advantages Which are Over-Stressed

1. Leasing provides greater flexibility than does ownership in the event that the asset becomes unprofitable.
2. Leasing is an economical method of obtaining expert servicing of equipment beyond the capability of the firm's own maintenance department.
3. Leasing permits cost savings.
4. Leasing presents special accounting advantages to a firm using direct costing.

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[1]Since leasing is only a means of financing, the decision to borrow or lease should be based largely upon quantitative differences. For a discussion of various methods of quantifying financing alternatives see: William D. McEachron, "Leasing: A Discounted Cash-Flow Approach," The Controller, Vol. XXIX (May, 1961), pp. 213-219; Edward A. Ravenscroft, "Return on Investment: Fit the Method to Your Need," Harvard Business Review, Vol. XXXVIII (March-April, 1960), pp. 97-109; Thomas N. Spaeth, "Discounting Differential Cost in Machine Replacement--An Outline," N.A.A. Bulletin, Vol. XLI (June, 1960), pp. 18-20; Allen Sykes, "Lease or Buy--An Exercise in Economic--Accounting Arithmetic," Accountancy, Vol. LXXI (March, 1960), pp. 153-156; Richard F. Vancil, "Lease or Borrow--New Method of Analysis,"

The above arguments seem to be perfectly valid under certain circumstances but are often over-stressed in importance or else presented as though they had almost universal application. An example is the argument that leasing provides increased flexibility. It is true that under certain circumstances the lease may increase a firm's flexibility; however, there is nothing flexible about a long-term noncancellable lease agreement which provides the firm almost no escape if the asset should prove unusable. On the other hand, if the firm owns an asset rather than leases it, and the property becomes unprofitable, it can sell the asset thereby providing more flexibility than under a lease agreement.

Advantages of Avoiding Ownership

1. Leasing eliminates the need for preparation of time-consuming depreciation schedules and subsidiary fixed asset schedules.
2. Leasing enables a firm to gain the use of assets without the problems associated with ownership.

The above arguments are not valid because they merely represent "shifted headaches." It is true that by leasing, the user of an asset can avoid doing certain costly and time-consuming things, such as preparing depreciation schedules and subsidiary records of fixed assets. He cannot, however, avoid paying for these activities because under a lease agreement the user of the asset merely "subcontracts" these functions to the lessor. It is not an advantage to be able to pay some outsider to do something that can be done more economically by your own staff.

Harvard Business Review, Vol XXXIX (September-October, 1961), pp. 122-136; Richard F. Vancil, "Lease or Borrow--Steps in Negotiation," Harvard Business Review, Vol. XXXIX (November-December, 1961), pp. 138-159.

Advantages in Laws and Regulations

1. Leasing enables the management of a lessee firm to avoid the "red tape" associated with capital expenditure controls.
2. Leasing enables a firm or division within a firm to stay within its operation budget.
3. Leasing enables firms to obtain certain federal, state, and local tax advantages.
4. Lease charges are reimbursable costs under certain Government contracts whereas the cost of financing (debt or equity) is not.
5. Leasing avoids the restrictions which normally accompany long-term debt.

This group of arguments represents leasing "loopholes." They are valid arguments in favor of leasing only because some responsible party has failed to understand the true nature of the financial lease. For example, in many companies top management has established capital expenditure controls with the idea that all major acquisitions of property must be properly justified. Because these managements have not understood the true nature of the financial lease, the control procedures have only been extended to "purchases" of property. As a result of this "loophole," lower management has by-passed these controls by acquiring the desired equipment through long-term lease agreements, often at considerably higher cost.

Similarly, the misunderstanding of the true nature of the financial lease has resulted in the enactment of poor laws and regulations. For example, the Armed Services Procurement Regulations clearly exclude the cost of borrowed funds as a reimbursable contract cost. On the other hand, in regard to leases, the regulations state that "rental costs of land, building and equipment and other personal property are allowable if the rates are reasonable." [1]

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[1] Armed Services Procurement Regulations 15-205.34 (a).

Certainly this is an advantage of leasing from the standpoint of the contractor and has probably contributed to its wide use in defense industries. However, there is no sound reason why the interest factor contained in a lease agreement should not be treated as a cost of debt. The provision in the Armed Services Procurement Regulations which allows the interest element in a lease payment as a reimbursable contract cost while excluding the cost of "debt" is simply a tax "loophole." It seems likely that the officials who prepared the regulations were not aware that the wording would permit contractors to shift the cost of capital to the Government.

Some state and local laws are similarly deficient. For example, where tax levies are based upon the firm's total capital rather than upon its equity capital only, the leased assets are often exempt from the tax. One such act, the Texas Corporate Francise Tax, states:

> The tax is based upon that proportion of the stated capital, surplus and undivided profits, plus the amount of outstanding bonds, notes and debentures (outstanding bonds, notes and debentures shall include all written evidences of indebtedness which bear a maturity date of one year or more from date of issue. . .), as the gross receipts from its business done in Texas bear to the total gross receipts from its entire business.[1]

In regard to this and similar laws Alvin Zises makes the following statement:

> Because law follows the mores and customs of a people, treatment of the leases as debt may eventually cause the taxing authorities to similarly treat all leases as debt. . . . In view of the clamor for taxes, the imagination need not be stretched to foresee how the state of Texas may view the capitalization of long-term commitments if they were reported as "evidences of indebtedness."[2]

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[1]Commerce Clearing House, Topical Law Reports, State Tax Guide (2d ed.; Chicago: Commerce Clearing House, Inc., 1961), p. 856.

[2]Alvin Zises, "Disclosure of Long-Term Lease," The Journal of Accountancy, Vol. CXI (February, 1961), p. 40.

Zises' point is a valid one from the standpoint of lessees, lessors, Government contractors, or others who may have vested interests in current tax "loopholes." From the standpoint of the taxpayers who are carrying an unfair share of the tax load, however, the picture is quite different.

Advantages of Financial Leverage

1. Leasing frees working capital and gets the merchandising or manufacturing company "out of the real estate business."
2. Leasing enables a firm to acquire modern equipment that it could not otherwise afford.
3. Leasing avoids dilution of ownership.
4. Leasing provides a hedge against obsolescence and inflation.

The above arguments are really not advantages of leasing only but advantages of not using equity financing. They are equally applicable to conventional debt, leasing or any other form of non-equity financing. They are really arguments in favor of using financial leverage or of "trading on the equity." This theory states that if a firm can earn more on an investment than the cost of the funds invested, the excess amount will represent a "windfall" gain to the stockholders. It makes no difference whether the funds are provided through a lease agreement or through more conventional debt instruments. The principle is still the same. In comparing any form of debt to equity, the arguments presented in this group seem to be perfectly valid.[1] In comparing the

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[1]The theory of "trading on the equity" has long been accepted as a fundamental principle of finance. However, recently Modigliani and Miller have challenged the advantages to the company's residual owners of favorable "trading on the equity." For an excellent discussion of this subject see: F. Modigliani and M. H. Miller, "The Cost of Capital, Corporation Finance, and The Theory of Investment," The American Economic Review, Vol. XLVIII (June, 1958), pp. 261-296; D. Durand, "The Cost of Capital, Corporation Finance, and The Theory of Investment: Comment," The American Economic Review, Vol. XLIX (September, 1959), pp. 639-654; and F. Modigliani and M. H. Miller,

lease with the more conventional forms of debt financing, however, these arguments are of no concern. Any case presented in favor of leasing should make the fact clear that these particular advantages are not unique to leasing but are equally applicable to conventional debt financing. The buy-lease controversy would be much more clear if it were not cluttered with arguments which are not applicable.

Advantages of Improved Financial Position

1. Leasing improves the lessee company's balance sheet.
2. Leasing improves the lessee company's financial ratios.
3. Leasing increases the total amount of credit which is available to a firm.
4. Leasing provides one hundred per cent financing rather than sixty-six and two-thirds per cent or seventy-five per cent.
5. Leasing permits greater turnover of capital.

The above arguments are all associated with the method of balance sheet presentation and are heavily stressed in promotional literature of the leasing industry. Typical of this literature are the following comments taken from a promotional pamphlet of United States Leasing Corporation:

> For the very simple reason that a lease is not a loan, your credit is effectively conserved when equipment is leased. If funds are borrowed for the purchase of equipment, existing lines of credit will be reduced by a like amount. If the equipment is leased, on the other hand, credit lines remain virtually intact since the lease is financed through United States Leasing Corporation. In effect, therefore, leasing extends your present borrowing ceiling, because: The combination of leasing and borrowing--compared to borrowing alone--produces the greater command of credit. Since leasing

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"The Cost of Capital, Corporation Finance, and the Theory of Investment: Reply," The American Economic Review, Vol. XLIX (September, 1959), pp. 655-669.

permits the acquisition of equipment without disruption of existing credit lines, it serves as a new and practical credit source.

The balance sheet effect of leasing can also be important. If equipment is purchased and capitalized, it follows that liabilities will be increased, the asset-to-liability ratio will be impaired and liquidity will be decreased. When the equipment is leased, on the other hand, your important ratios remain unchanged. The net result is a cleaner balance sheet, with neither impairment of credit nor reduction of liquidity.

For balance sheet purposes, the net effect of leasing is clearly shown by the following comparison between cash purchase, conventional borrowing, and leasing. The comparison is based on the acquisition of equipment having a total cost of $25,000.

If Equipment costs $25,000	Before Obtaining Equipment	After Buying for Cash	After Borrowing	After Leasing
Current Assets	$100,000	$ 75,000	$100,000*	$100,000
Fixed Assets	50,000	75,000	75,000	50,000
Total	$150,000	$150,000	$175,000	$150,000
Liabilities	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Capital	100,000	100,000	100,000	100,000
Total	$150,000	$150,000	$175,000	$150,000
Liquidity (Current Ratio)	2 to 1	1.5 to 1	1.33 to 1	2 to 1
Debt of Equity	1 to 2	1 to 2	1.5 to 2	1 to 2

*But the required compensating balance is frozen and cannot be used.[1]

Although the above financial statements seem to present a strong case for leasing, there are instances where it would be desirable for the lessee to include the leased property in his balance sheet. One writer

[1]United States Leasing Corporation, The Engineered Equipment Lease. A promotional pamphlet of the United States Leasing Corporation, copyright 1961.

has gone so far as to suggest that the accountant prepare two balance sheets and that the lessee use whichever is to his advantage in the particular circumstances. (Talk about wanting to have your cake and eat it too!) He writes:

> The overall operating strength of a company . . . which leases will be apparent to anyone who studies its operating reports. Furthermore, the balance sheet of the lessee corporation will not depict a large outstanding liability in the form of conditional sales accounts payable. When the use of chattel assets is acquired on leasing programs the lease liability is not shown on the balance sheet as a liability. Of course there is no asset account for the leased equipment on the asset side; however, the asset to liability ratio and income to liability ratio will be higher. These ratios are important to creditors and to shareholders. Thus a lessee may, by leasing, save its regular credit sources for other purposes, and at the same time show a favorable balance sheet and current operating report when the time comes to utilize this credit. The advent of extensive balance sheet footnoting may result in the listing in footnotes of the leasing contracts, but accountants are by no means agreed as to the necessity for this practice. Even if the listing is necessary, the strength of this operating position will still be apparent.
>
> Conversely, there may be an economic advantage in leasing for some public service corporations, such as utilities, airlines, and the railroads, which has not been utilized because of this standard balance sheet presentation. Should not the airlines include those leased assets which they use in their business when figuring their rate base, even though these assets are not listed on the balance sheet? Accountants recognize that the presentation of the economic picture of a corporation can take many forms, and may require different techniques or sets of reports for different problems. These different reports need not coincide as long as they truly depict the accounting information which it is their function to impart. . . .
>
> Business enterprises should be able to include their leased assets on their balance sheets for rate making purposes, even though for certain other general accounting purposes these assets are not to be so listed. This concept is realistic and feasible. It should be remembered that in many cases the lessees' control of their leased equipment is virtually complete under the lease terms. The rental payments often purchase the use of the equipment

> for its entire useful life. If the rate determining agencies must cling to ownership concepts in determining these rate questions, this control of equipment is sufficiently akin to ownership to be reflected in the rate base. This legal and accounting treatment of leased equipment could be fairly applied to many situations. The airlines, for example might lease their entire ground equipment fleet, and still retain the benefits of using these assets in their rate determination proceedings.[1]

The weakness in this last group is the fact that the arguments are all based upon incomplete information presented in the financial statements. To the extent that the readers of these financial statements fail to look beyond the information presented in the body thereof, these are valid advantages from the standpoint of the lessee. They represent balance sheet "illusions" because the statements upon which they are based do not present all the financial facts. The methods of balance sheet presentation will be discussed at length in subsequent chapters. Suffice to say here, any acceptable method must present a complete report of the financial facts associated with the transaction. It should not tend to give one form of financing a competitive advantage over another. Selection of a method of financing is a decision that should be made independently of the accounting and reporting treatment.

General Misunderstanding

The stressing of "half truths" in advertising is not peculiar to the leasing industry. In fact the proponents of leasing have properly noted that banks do not tell the whole truth when they quote a five per cent interest rate on term loans which require a compensating balance.[2]

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[1]Charles W. Steadman, "Chattel Leasing--A Vehicle for Capital Expansion," The Business Lawyer, Vol. XIV (January, 1959), pp. 525-526.

[2]See for example: Clyde William Phelps, "Small Business and Motor Vehicle Leasing," Credit and Financial Management, Vol. LXI (May, 1959), p. 21.

This practice of "fudging" has long been a part of American business and will probably continue to play a part in business decisions. The thing that is most disturbing about the arguments presented in favor of leasing is the fact that outsiders, supposedly acting in independent roles, have likewise been guilty of presenting a slanted case for leasing. "The Pros and Cons of Leasing," a study published by The Foundation for Management Research, is a case in point. This study is directed to smaller manufacturers, department stores and supermarkets and presents several case studies which seem to make leasing appear to be much more attractive than other financing alternatives. The case studies presented are based upon some very important assumptions which are not clearly stated. Not withstanding the special nature of these cases and in spite of the important assumptions made, the Foundation makes the following statement:

> While the dollar cost of leasing is greater than purchase through cash, the net cost is less. Actually, the net cost of leasing is less than cash purchase, less than purchase through conditional sales contract, less than any other means of acquiring the use of the equipment.[1]

In order to see what is behind this statement, let us refer to the illustrations upon which it was based. The case studies were prepared based upon the following set of facts:

> Using the lease payment schedules typical for small and medium-size enterprises, we might look at a typical company considering leasing, and see what its choices are.
>
> The company, a medium-sized manufacturer, called the Widget Corporation, has a net worth of $250,000 and liquid working capital of $100,000. Net profits (after taxes) on net working capital of the company is assumed to be a typical 14 per cent, the corporate tax rate is 52 per cent, and profit before taxes

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[1]The Foundation for Management Research, "The Pros and Cons of Leasing: A Study for Smaller Manufacturers, Department Stores, Supermarkets," (Chicago, Illinois: The Foundation for Management Research, c.1960), p. 9.

on net working capital is about 30 per cent. This manufacturer wishes to acquire some new machinery, costing $25,000 with a composite life of ten years and no scrap value. (These assumptions are made in round figures for ease of computation. In reality, the life of the equipment may be longer or shorter, and the equipment may have some or no cash value at the end. These variables do not materially affect the statistical conclusions below.)

Such a manufacturer in wishing to use this equipment, has four choices: (1) he can buy it entirely for cash taken out of his liquid capital; (2) he can finance it through a conditional sales contract; (3) he can finance it through his bank and repay it in instalments over (say) three years; or (4) he can lease the equipment.[1]

Case studies were prepared to compare the four alternatives which faced the Widget Corporation. These are reproduced in Exhibits 1 through 6. Each study indicates that although the gross dollar outlay of leasing is greater than under any alternative, the net cost of leasing is less. The conclusions may be summarized as follows:

Cash Purchase vs. Leasing:

1. In the 10th year of leasing, the company's working capital is still greater by $5,469 (as shown in column 3 of Exhibit 2) than it would have been under the cash purchase plan.

2. Company net profits after taxes for the 10-year leasing period, are greater by $12,436 (as shown in column 7 of Exhibit 2) than under the cash purchase plan.

Conditional Sales Contract vs. Leasing:

1. In the 10th year, as a result of leasing, the company's working capital is still greater by $1,944 (as shown in column 3 of Exhibit 4) than under the conditional sales contract purchase plan.

2. In the 10th year, as a result of leasing, the company's net profits after taxes for the 10-year period are greater by

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[1] Ibid.

$6,844 (as shown in column 7 of Exhibit 4) than under the sales contract purchase plan.

Bank Loan vs. Leasing:

1. The calculations in Exhibits 5 and 6 show clearly that a company leasing $25,000 worth of equipment, after 10 years would still have $1,337 more working capital on hand (as shown in column 3 of Exhibit 6) than the company would have had if it borrowed the cash from a bank on a three-year instalment basis, and used the cash to buy the equipment.

2. Similarly, at the end of 10 years, a company leasing the equipment would have $6,537 more net profit after taxes (as shown in column 7 of Exhibit 6) than if the same company had bought the equipment for cash, using a bank instalment loan for the funds.[1]

A closer analysis of the exhibits presented by The Foundation for Management Research reveals quite a different picture. To begin with, the conclusions presented by The Foundation ignore the fact that in all cases the gross outlay is greater under leasing than under any other alternative. For example, the gross outlay is actually $12,874 greater before taxes and $6,175 greater after taxes under leasing than under the cash purchase. This means that the company's net profits after taxes for the ten-year leasing period are greater by only $6,261 rather than $12,436 as stated by the Foundation; i.e., what the Foundation states is the "net profits after taxes" is really extra gross income from leasing. The "net profits" can be computed only after deducting therefrom the extra expenses of leasing. By combining the figures shown in Exhibits 1 and 2 we arrive at this same conclusion; i.e., the net advantage of leasing is only $6,261, the difference between the $6,175 in column (k) of Exhibit 1 and the $12,436 in column (7) of Exhibit 2.

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[1]Ibid., pp. 10-11. Table numbers are mine.

EXHIBIT 1

Comparison of Lease Plan* with Cash Purchase in Acquiring Equipment Valued at $25,000 with a Composite Life of Ten Years and No Scrap Value.

Method of Financing Equipment**	(a) Year	(b) Cash on hand at beginning of year	(c) Cash*** Income before d, e, f, g & h	(d) Interest	(e) Depreciation (non-cash expense)	(f) Rent**** (Cash expense)	(g) Income Tax at 1958 Rates	(h) Loan or Purchase Payments	(i) Cash remaining from yr.'s operations (c, d, f, g, and h)	(j) Cash on hand at end of year (b & i)	(k) Cash excess or deficiency of Lease Plan compared with other plan
Lease Plan:	1	$100,000	$50,000			$ 9,708	$ 20,952		$ 19,340	$119,340	
Three-year	2	119,340	50,000			9,708	20,952		19,340	138,680	
lease with 7	3	138,680	50,000			9,708	20,952		19,340	158,020	
one-year renew-	4	158,020	50,000			1,250	25,350		23,400	181,420	
als. Financing	5	181,420	50,000			1,250	25,350		23,400	204,820	
rate: 5½%	6	204,820	50,000			1,250	25,350		23,400	228,220	
per year of original	7	228,220	50,000			1,250	25,350		23,400	251,620	
cost of equipment.	8	251,620	50,000			1,250	25,350		23,400	275,020	
Renewal rate:	9	275,020	50,000			1,250	25,350		23,400	298,420	
5% per year.*****	10	298,420	50,000			1,250	25,350		23,400	321,820	
						$37,874	$240,306		$221,820		
Purchase: Cash	1	$100,000	$50,000		$ 4,545		$ 23,637	$25,000	$ 1,363	$101,363	$17,977
(net 30 days).	2	101,363	50,000		4,092		23,872	—	26,128	127,491	11,189
Depreciation	3	127,491	50,000		3,638		24,108	—	25,892	153,383	4,637
methods: sum-	4	153,383	50,000		3,182		24,345	—	25,655	179,038	2,382
of-the-digits.	5	179,038	50,000		2,727		24,582	—	25,418	204,456	364
	6	204,456	50,000		2,275		24,817	—	25,183	229,639	(1,419)
	7	229,639	50,000		1,818		25,055	—	24,945	254,584	(2,964)
	8	254,584	50,000		1,363		25,291	—	24,709	279,293	(4,273)
	9	279,293	50,000		907		25,528	—	24,472	303,765	(5,345)
	10	303,765	50,000		453		25,770	—	24,230	327,995	(6,175)
					$25,000		$247,005	$25,000	$227,995		

* The Lease Plan used for comparison purposes here is one of several offered by Nationwide Leasing Company.

** Savings produced by the use of the asset itself are eliminated from the calculations, since those savings would accrue whether the asset is purchased or leased.

*** Cash income is considered the total cash income available to the corporation from its year's operation.

**** The lease rate is that which could apply to good, small and medium-size companies. Normally a small deposit is required with the signing of the lease. However, for simplicity, no advance payment is assumed here.

***** Renewal rates may vary, depending on the nature of the equipment and type of usage.

EXHIBIT 2

Projected Earnings on Capital Freed by Leasing as Compared with Cash Purchase

(1) Year	(2) Freed Capital	(3) Freed Capital plus cumulative earnings from previous year (Column 7)	(4) Earnings at 30% on Col. 3 Totals	(5) Income taxes at 52% of Column 4 Totals	(6) Earnings after taxes	(7) Cumulative Earnings after taxes
1	$17,977	$17,977	$ 5,393	$ 2,804	$ 2,589	$ 2,589
2	11,139	13,778	4,133	2,149	1,984	4,573
3	4,637	9,210	2,763	1,437	1,326	5,899
4	2,332	8,281	2,484	1,292	1,192	7,091
5	364	7,455	2,236	1,163	1,073	8,164
6	(1,419)	6,745	2,023	1,052	971	9,135
7	(2,964)	6,171	1,851	963	888	10,023
8	(4,273)	5,750	1,725	897	828	10,851
9	(5,345)	5,506	1,652	859	793	11,644
10	(6,175)	5,469*	1,649	857	792	12,436**
			$25,909	$13,473	$12,436	

Using Column k, "Cash excess or deficiency" figures from Exhibit B, this second table projects the past earnings on use of freed capital. The assumption is a 52% tax rate with regular reinvestment in the business of each year's earnings as estimated at rate of 30% (on net working capital) yearly before taxes.

The illustration in Exhibit C also assumes that lease expenses are deductible from gross income before taxes. This assumption is valid only if the lease is a genuine lease. For information on this point, the reader is referred to Chapter VI.

* Additional working capital still available

** Additional net profit

EXHIBIT 3

Comparison of Lease Plan* with Conditional Sales Contract in Acquiring Equipment
Valued at $25,000 with a Composite Life of Ten Years and No Scrap Value.

Method of Financing Equipment**	(a) Year	(b) Cash on hand at beginning of year	(c) Cash*** Income before d, e, f, g & h	(d) Interest	(e) Depreciation (non-cash expense)	(f) Rent**** (Cash expense)	(g) Income Tax at 1958 Rates	(h) Loan or Purchase Payments	(i) Cash remaining from yr.'s operations (c, d, f, g, and h)	(j) Cash on hand at end of year (b & i)	(k) Cash excess or deficiency of Lease Plan compared with other plan
Lease Plan:	1	$100,000	$50,000			$ 9,708	$ 20,952		$ 19,340	$119,340	
Three-year	2	119,340	50,000			9,708	20,952		19,340	138,680	
lease with 7	3	138,680	50,000			9,708	20,952		19,340	158,020	
one-yr. renewals.	4	158,020	50,000			1,250	25,350		23,400	181,420	
Financing rates	5	181,420	50,000			1,250	25,350		23,400	204,820	
5½% per year of	6	204,820	50,000			1,250	25,350		23,400	228,220	
original cost	7	228,220	50,000			1,250	25,350		23,400	251,620	
of equipment.	8	251,620	50,000			1,250	25,350		23,400	275,020	
Renewal rate:	9	275,020	50,000			1,250	25,350		23,400	298,420	
5% per year.*****	10	298,420	50,000			1,250	25,350		23,400	321,820	
						$37,874	$240,306		$221,820		
Conditional	1	$100,000	$50,000	$1,125	$ 4,545		$ 22,987	$12,500	$ 13,388	$113,388	$ 5,952
Sales Contract:	2	113,388	50,000	1,125	4,692		23,287	6,250	19,338	132,726	5,954
Financing rates	3	132,726	50,000	1,125	3,638		23,523	6,250	19,102	151,828	4,637
6% per yr. on	4	151,828	50,000	—	3,182		24,345	—	25,655	177,483	3,937
original balance	5	177,483	50,000	—	2,727		24,582	—	25,418	202,901	1,919
of $18,750,	6	202,901	50,000	—	2,275		24,817	—	25,183	228,084	136
Down payment 25%.	7	228,084	50,000	—	1,818		25,055	—	24,945	253,029	(1,409)
Finance charges:	8	253,029	50,000	—	1,363		25,291	—	24,709	277,738	(2,718)
$3,375; 3-yr. term.	9	277,738	50,000	—	907		25,528	—	24,472	302,210	(3,790)
	10	302,210	50,000	—	453		25,770	—	24,230	326,440	(4,620)
Depreciation Method: sum-of-the-digits.				$3,375	$25,000		$245,185	$25,000	$226,440		

* The Lease Plan used for comparison purposes here is one of several offered by Nationwide Leasing Company.

** Savings produced by the use of the asset itself are eliminated from the calculations, since those savings would accrue whether the asset is purchased or leased.

*** Cash income is considered the total cash income available to the corporation from its year's operation.

**** The lease rate is that which could apply to good, small and medium-size companies. Normally a small deposit is required with the signing of the lease. However, for simplicity, no advance payment is assumed here.

***** Renewal rates may vary, depending on the nature of the equipment and type of usage.

EXHIBIT 4

Projected Earnings on Capital Freed by Leasing as Compared with Conditional Sales Contract

(1) Year	(2) Freed Capital	(3) Freed Capital plus cumulative earnings from previous year (Column 7)	(4) Earnings at 30% on Col. 3 Totals	(5) Income taxes at 52% of Column 4 Totals	(6) Earnings after taxes	(7) Cumulative Earnings after taxes
1	$ 5,952	$5,952	$ 1,786	$ 929	$ 857	$ 857
2	5,904	6,811	2,043	1,062	981	1,838
3	4,659	6,675	1,942	1,010	932	2,770
4	3,959	6,707	2,012	1,046	966	3,736
5	1,919	5,655	1,696	882	814	4,550
6	136	4,686	1,405	731	675	5,225
7	(1,472)	3,816	1,145	595	550	5,775
8	(2,916)	3,057	917	477	440	6,215
9	(3,790)	2,425	727	378	349	6,564
10	(4,627)	1,944*	583	303	280	6,844**
			$14,257	$7,413	$6,844	

Using Column k, "Cash excess or deficiency" figures from Exhibit D, this second table projects the yearly earnings on use of freed capital. The assumption is a 52% tax rate with regular reinvestment in the business of each year's earnings as estimated at rate of 30% (on a five-year basis) yearly before taxes.

The illustration in Exhibit E also assumes that lease expenses are deductible from gross income before taxes. This assumption is valid only if the lease is a genuine lease. For information on this point, the reader is referred to Chapter VI.

* Additional working capital still available

** Additional net profit

EXHIBIT 5

Comparison of Lease Plan* with 7.5% Bank Loan in Acquiring Equipment Valued at $95,000 with a Composite Life of Ten Years and No Scrap Value.

Method of Financing Equipment**	(a) Year	(b) Cash on hand at beginning of year	(c) Cash*** Income before d, e, f, g & h	(d) Interest	(e) Depreciation (non-cash expense)	(f) Rent**** (cash expense)	(g) Income Tax at 1958 Rates	(h) Loan or Purchase Payments	(i) Cash remaining from yr.'s operations (c, d, f, g, and h)	(j) Cash on hand at end of year (b & i)	(k) Cash excess or deficiency of Lease Plan compared with other plan
Lease Plan:	1	$100,000	$50,000			$ 9,833	$ 20,887		$ 19,280	$119,280	
Three-year lease	2	119,280	50,000			9,833	20,887		19,280	138,560	
with 7 one-year	3	138,560	50,000			9,833	20,887		19,280	157,840	
renewals.	4	157,840	50,000			1,250	25,350		23,400	181,240	
Financing rate:	5	181,240	50,000			1,250	25,350		23,400	204,640	
6% per yr.	6	204,640	50,000			1,250	25,350		23,400	228,040	
of original cost	7	228,040	50,000			1,250	25,350		23,400	251,440	
of equipment.	8	251,440	50,000			1,250	25,350		23,400	274,840	
Renewal rate:	9	274,840	50,000			1,250	25,350		23,400	298,240	
5% per year.*****	10	298,240	50,000			1,250	25,350		23,400	321,640	
						$30,249	$240,111		$221,640		
Purchase:	1	$100,000	$50,000	$ 937	$ 4,545		$ 23,149	$12,500	$ 13,414	$113,414	$ 5,866
75% bank loan.	2	113,414	50,000	937	4,090		23,386	6,250	19,427	132,841	5,719
Interest rate:	3	132,841	50,000	937	3,636		23,622	6,250	19,191	152,032	5,808
5% rate on	4	152,032	50,000	—	3,181		24,346	—	25,654	177,686	3,554
original balance,	5	177,686	50,000	—	2,727		24,582	—	25,418	203,104	1,536
equal monthly in-	6	203,104	50,000	—	2,272		24,819	—	25,181	228,285	(245)
stallments. Finance	7	228,285	50,000	—	1,818		25,055	—	24,945	253,230	(1,790)
75% of $25,000 =	8	253,230	50,000	—	1,363		25,291	—	24,709	277,939	(3,099)
$18,750. Total fi-	9	277,939	50,000	—	909		25,527	—	24,473	302,412	(4,172)
nance charges:	10	302,412	50,000	—	454		25,764	—	24,236	326,648	(5,008)
$2,811.00.											
Depreciation Method: sum-of-the-digits.				$2,811	$24,995		$245,541	$25,000	$226,648		

* The Lease Plan used for comparison purposes here is one of several offered by Nationwide Leasing Company.

** Savings produced by the use of the asset itself are eliminated from the calculations, since those savings would accrue whether the asset is purchased or leased.

*** Cash income is considered the total cash income available to the corporation from its year's operation.

**** The lease rate is that which could apply to good, small and medium-size companies. Normally a small deposit is required with the signing of the lease. However, for simplicity, no advance payment is assumed here.

***** Renewal rates may vary, depending on the nature of the equipment and type of usage.

EXHIBIT 6

Projected Earnings on Capital Freed by Leasing as Compared with 75% Bank Loan

(1) Year	(2) Freed Capital	(3) Freed Capital plus cumulative earnings from previous year (Column 2)	(4) Earnings at 30% on Col. 3 Totals	(5) Income Taxes at 52% of Col. 4 Totals	(6) Earnings after taxes	(7) Cumulative earnings after taxes
1	$ 5,866	$5,866	$ 1,760	$ 915	$ 845	$ 845
2	5,719	6,564	1,969	1,024	945	1,790
3	5,808	7,598	2,279	1,185	1,094	2,884
4	3,554	6,438	1,931	1,004	927	3,811
5	1,536	5,347	1,604	834	770	4,581
6	(245)	4,336	1,301	677	624	5,205
7	(1,790)	3,415	1,024	532	492	5,697
8	(3,099)	2,598	779	405	374	6,071
9	(4,172)	1,857	557	296	274	6,345
10	(5,608)	1,337*	401	209	192	6,537**
			$13,618	$7,081	$6,537	

Using Column k, "Cash excess or deficiency" figures from Exhibit F, this schedule projects the post earnings on use of freed capital. The assumption is a 52% tax rate with regular reinvestment in the business of each year's earnings as estimated at rate of 30% (on average capital employed before taxes.

This illustration in Exhibit G also assumes that lease expenses are deductible from gross income before taxes. This assumption is valid only if the lease is a genuine lease. For information on this point, the reader is referred to Chapter VI.

* Additional working capital still available

** Additional net profit

Applying the same reasoning to the other case studies, we find that the net profits after taxes for the ten-year period are greater by only $2,224, rather than $6,844 under the conditional sales contract purchase plan ($6,844 in column (7) of Exhibit 4, less the $4,620 in column (k) of Exhibit 3). Similarly, the company leasing the equipment would have only $1,529, rather than $6,537, more net profit after taxes than it would have had if it borrowed the cash from a bank on a three-year instalment basis, and used the cash to buy the equipment ($6,537 in column (7) of Exhibit 6 less the $5,008 in column (k) of Exhibit 5).

In the tables, as well as in the conclusions the Foundation made the assumption that the equipment would have no scrap value at the end of the ten-year period. They later discuss the impact that a ten per cent salvage value would have on the conclusions reached. Since the sale of the asset at the end of the tenth year would be subject to capital gains tax, the after-tax gain on the sale of the equipment would amount to $1,875 (seventy-five per cent of $2,500). This would represent an additional advantage of ownership which would reduce the savings from leasing to only $4,386 under the cash purchase plan, to a mere $349 under the conditional sales contract, and actually reverse the bank loan case so that it favors ownership by $346.

The most serious objections to the study published by The Foundation for Management Research relate to the underlying assumptions. To begin with, the assumption was made that the thirty per cent relationship between profits before taxes and net working capital would hold true in the future regardless of the relative proportions of fixed assets and working capital. This implies a relationship which is absurd. A company does not earn profits on net working capital alone, but on all assets. The primary difference between current assets and fixed assets is one of time, and it is ridiculous to imply that only current assets

contribute to a firm's earnings. If profits were in fact earned only on current assets, then it would pay a firm to sell all non-current assets and put the cash to "work." And then, why stop there? Any firm that can earn thirty per cent return on any cash they can obtain should place no limit on borrowing. In fact, it would be profitable for them to pay as much as twenty or twenty-five per cent interest, since they would still come out ahead.

Another assumption which was passed over very lightly was the period over which the loan was to be repaid. Since the entire case for leasing was based on the "cash flows," the period of repayment is a key factor. The assumption that the loan is to be repaid "in instalments over (say) three years," is a necessary condition for making the lease appear more attractive. This may be illustrated by referring to Exhibits 7 and 8 in which all assumptions are the same as those made by the Foundation for Management Research in Exhibits 5 and 6 except that the bank loan is assumed to be payable in ten equal annual instalments instead of requiring a fifty per cent payment during the first year and a twenty-five per cent payment during each of the next two years.

By making only this one simple change in the assumptions, the outcome is completely reversed. Instead of favoring leasing by $1,529 after taxes (Exhibit 5 and 6), the case now favors ownership with bank financing by $19,803 ($181 from column (k) of Exhibit 7 and $19,622 from column (7) of Exhibit 8). Again, note that this complete reversal in conclusions came about solely by changing the period over which the loan was to be repaid.[1] This is hardly a point to be passed over lightly, and yet the terms of loan repayment were scarcely mentioned by the Foundation for Management Research in their "non-partisan" study.

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[1]Even the Foundation's assumption that the interest rate was five per cent on the original balance was retained, although it probably would have been more reasonable to assume that the interest was computed on the declining balance. If this one additional assumption is introduced, the case would favor ownership with bank financing by $24,482 instead of by the $19,803 indicated above.

EXHIBIT 7

Comparison of Lease Plan with Bank Loan in Acquiring Equipment*

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Lease Plan:										
1	$100,000	$50,000			$9,833	$20,887		$19,280	$119,280	
2	119,280	50,000			9,833	20,887		19,280	138,560	
3	138,560	50,000			9,833	20,887		19,280	157,840	
4	157,840	50,000			1,250	25,350		23,400	181,240	
5	181,240	50,000			1,250	25,350		23,400	204,640	
6	204,640	50,000			1,250	25,350		23,400	228,040	
7	228,040	50,000			1,250	25,350		23,400	251,440	
8	251,440	50,000			1,250	25,350		23,400	274,840	
9	274,840	50,000			1,250	25,350		23,400	298,240	
10	298,240	50,000			1,250	25,350		23,400	321,640	
					$38,249	$240,111		$221,640		
Purchase:										
1	$100,000	$50,000	$1,250	$4,545		$22,987	$2,500	$23,263	$123,263	$(3,923)
2	123,263	50,000	1.250	4,092		23,222	2,500	23,028	146,291	(7,611)
3	146,291	50,000	1,250	3,638		23,458	2,500	22,792	169,083	(11,063)
4	169,083	50,000	1,250	3,182		23,695	2,500	22,555	191,638	(10,218)
5	191,638	50,000	1,250	2,727		23,932	2,500	22,318	213,956	(9,136)
6	213,956	50,000	1,250	2,275		24,167	2,500	22,083	236,039	(7,819)
7	236,039	50,000	1,250	1,818		24,405	2,500	21,845	257,884	(6,264)
8	257,884	50,000	1,250	1,363		24,641	2,500	21,609	279,493	(4,473)
9	279,493	50,000	1,250	907		24,878	2,500	21,372	300,865	(2,445)
10	300,865	50,000	1,250	453		25,114	2,500	21,136	322,001	(181)
			$12,500	$25,000		$240,499	$25,000	$222,001		

*All assumptions and column headings are the same in this exhibit as those used in Exhibit 5 except that the bank loan is assumed to be payable in ten equal annual instalments instead of requiring a fifty per cent payment during the first year and a twenty-five per cent payment during each of the next two years.

EXHIBIT 8

Projected Earnings on Capital Freed by Ownership with Bank Financing Compared with Leasing

(1) Year	(2) Capital Freed by Ownership	(3) Freed Capital plus cumulative earnings from previous year (column 7)	(4) Earnings at 30% on Column 3 Totals	(5) Income taxes at 52% of Column 4 Totals	(6) Earnings after taxes	(7) Cumulative Earnings after taxes
1	$ 3,923	$ 3,923	$1,177	$ 612	$ 565	$ 565
2	7,611	8,176	2,453	1,276	1,177	1,742
3	11,063	12,805	3,842	1,998	1,844	3,586
4	10,218	13,804	4,141	2,153	1,988	5,574
5	9,136	14,710	4,413	2,295	2,118	7,692
6	7,819	15,511	4,653	2,420	2,233	9,925
7	6,264	16,189	4,857	2,526	2,331	12,256
8	4,473	16,729	5,019	2,610	2,409	14,665
9	2,445	17,110	5,133	2,669	2,464	17,129
10	181	17,310	5,193	2,700	2,493	19,622

A third objection to the study by the Foundation for Management Research is the fact that no mention was made of the interest rate implied in the lease agreement. The case studies state that the "finance rate" is "six per cent per year of the original cost of the equipment. Renewal rate: five per cent per year." Although they are likely to be confused with interest rates, the six per cent and the five per cent quoted above are actually rental rates, not interest rates. The "true" interest rate implied in the lease, assuming the equipment has no salvage value, is 16.1 per cent!

The fact that the cases presented by The Foundation for Management Research deal with only one isolated transaction is another reason the cases are "tilted" in favor of leasing. The assumption is apparently made that once the decision regarding this particular piece of equipment is made, the Widget Corporation's capital budgeting problems will be solved for the next ten years. Or, should the company find that they need another new piece of equipment the second year, they would presumably evaluate the "buy-lease" alternatives and again conclude that leasing would be most profitable.

The truth of the matter is, however, that capital budgeting cannot be done effectively on a piece-meal basis. To be effective, a firm must forecast its capital needs for several years in advance and simultaneously plan for financing.

To illustrate the danger of looking at isolated transactions, let us assume that the Widget Corporation decides to lease the asset in question based upon the careful analysis suggested by The Foundation for Management Research. Assume further that as existing assets wear out or become obsolete, the company finds it necessary to acquire additional equipment in subsequent years. Based upon the suggested analysis of each isolated transaction, the company selects lease financing in each case. This practice continues for a number of years until the

company finds itself "out of the real estate business"--all of its assets being leased.

If the company were confronted with a $25,000 capital budget each year, then ownership with bank financing would save the company $2,880 per year after taxes. If the "freed capital" were put to work earning thirty per cent (as assumed in the other cases), then the company would be better off to the extent of $36,053 at the end of a ten-year period by owning rather than leasing.[1]

The "illusions" and "loopholes" discussed in the preceding paragraphs make two points apparent. First of all, many of the listed advantages of leasing are not real and are based on faulty reasoning. As the true nature of the financial lease becomes more widely understood, we can expect these advantages to disappear.

The second point relates to the responsibility for these "illusions" and "loopholes." To the extent that certified public accountants have contributed thereto, the accounting profession must bear the responsibility for their existence. If the accountant does not take the initiative in changing practices which create false impressions in the minds of the public, he will fast lose his professional standing when the truth is out.

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[1]As discussed previously, the assumption that freed working capital will continue to earn thirty per cent return is absurd. It has been used here solely to make the cases comparable to those presented by the Foundation for Management Research.

CHAPTER III

EXTENT AND NATURE OF CURRENT FINANCIAL STATEMENT REPORTING

This chapter is concerned with the current methods of reporting long-term lease agreements in published financial statements. The extent and nature of current reporting will be discussed first. This will be followed by an examination of the current rules for reporting as they have been prescribed by the American Institute of Certified Public Accountants and the Securities and Exchange Commission. Next, the causes of apparent deficiencies in the recording and reporting of long-term leases will be discussed. Finally, the rationale from which current reporting practices have evolved will be examined.

Nature of Current Reporting

Each year the American Institute of Certified Public Accountants publishes a study of the annual reports to stockholders of 600 industrial companies under the title Accounting Trends and Techniques. One of the subjects analyzed is the disclosure of long-term leases by lessees. Exhibit 9 summarized the nature of the leasehold information disclosed in the 1960 survey.

Of the 600 companies included in the survey, 223 referred to, or implied, the existence of long-term leases. Slightly more than half of this group provided details in varying degrees concerning these agreements; about one-third mentioned the leases without disclosing details thereof; and nearly one-sixth indicated leases only by reference to leaseholds or leasehold improvements. It is difficult to estimate the extent

EXHIBIT 9

Disclosure of Long- Term Leases by Lessees

Disclosures by lessees	Details Set Forth In: Footnotes	Letter to Stockholder	1960 Total	1951 Total
Annual rental amount	133	3	136	59
Aggregate rental amount	10	1	11	2
Lease expiration date	27	1	28	14
Number of leases	57	2	59	37
Renewal option	15	1	16	13
Sale-lease-back feature	19	3	22	3
Term of leases	85	2	87	12
Total	346	13	359	140

Number of companies			
Setting forth details of long term leases		117	61
Mentioning long-term leases but omitting details thereof		69	139
Indicating long-term leases (without mention thereof) by reference to leaseholds or leasehold improvements		37	
		223	200
Neither referring to nor indicating long-term leases		377	400
Total		600	600

Source: American Institute of Certified Public Accountants, Accounting Trends and Techniques, (15th ed.; New York: American Institute of Certified Public Accountants, 1961). Reproduced by permission of the American Institute of Certified Public Accountants.

to which leasing was prevalent among the 377 companies that neither referred to nor implied the existence of long-term leases.

Virtually all of the companies that mentioned long-term leases did so in footnotes to the financial statements. One company (Mohasco Industries, Inc.) incorporated the pertinent amounts in its balance sheet. Two companies (Arden Farms Company and Fairbanks, Whitney and Company) included lease obligations figures in their balance sheets in memorandum form only. The remaining companies reported their leases in footnotes to the financial statements.[1] The amount of detail contained in these footnotes varied greatly as seen from the following illustrations:

J. C. Penney Company

> At January 31, 1961 the total minimum annual rentals payable under leases expiring after five years was approximately $11,700,000. Leases covering about 79% of this amount will expire on various dates during the next twenty years.[2]

Calumet and Hecla, Inc.

> The Company and its consolidated subsidiaries have leased certain plant and warehouse facilities under long-term leases expiring at various dates to 1982. Aggregate rentals under such leases approximate $6,321,000, of which $337,276 is payable in 1961.[3]

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[1]Some of the details for a few of these companies were reported in the letter to the stockholders which accompanied the financial statements as part of the company's annual report.

[2]J. C. Penney Company, Annual Report, January 31, 1961, p. 15.

[3]Calumet and Hecla, Inc., Annual Report, December 31, 1960, p. 10.

The May Department Stores Company

The Company had eighty-six leases in effect at January 31, 1961 having terms of more than three years after that date. These leases provide for present aggregate minimum annual rentals of approximately $10,647,000 (of which $3,848,000 is payable to The May Stores Shopping Centers, Inc. and $2,922,000 is payable to The May Stores Realty Corporation), plus in certain instances real estate taxes (such amounts being included in taxes) and other expenses and, in respect of some of the leases, additional amounts based upon percentages of sales.[1]

Pepsi-Cola Company

The Company and its consolidated subsidiaries are lessees under 41 leases having unexpired terms of more than three years which expire at various dates to 1992. The present minimum aggregate annual rental under these leases is approximately $1,800,000.[2]

Falstaff Brewing Corporation

The companies are committed under long-term leases for rentals aggregating $307,000 per annum. At December 31, 1960, there were commitments aggregating approximately $6,600,000 for property additions.[3]

Canada Dry Corporation

The Company occupies eleven plants (eight of which were formerly owned by it) under leases of land and buildings which provide for current aggregate annual rentals of $615,371 and

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[1]The May Department Stores Company, Annual Report, January 31, 1961, p. 17.

[2]Pepsi-Cola Company, Annual Report, December 31, 1960, p. 33.

[3]Falstaff Brewing Corporation, Annual Report, December 31, 1960, p. 15.

successive renewal options for varying periods commencing 1967-80 at substantially lesser aggregate annual rentals, the Company also paying taxes, insurance, maintenance and repairs under these leases. In addition the companies occupy other premises under long-term leases at aggregate annual rentals of $308,080.[1]

Federated Department Stores, Inc.

Long-term leases at January 28, 1961 comprised 116 leases with unexpired terms of more than three years and with aggregate minimum annual rentals of approximately $8,507,000. Most of these leases require the payment of real estate taxes (recorded as taxes) and other expenses.[2]

Dresser Industries, Inc.

Total commitment under a continuing mobile equipment lease was approximately $5,000,000 at October 31, 1960. Annual rental payments thereunder are approximately $2,900,000.[3]

Air Reduction Company, Incorporated

At the same date [December 31, 1960] the Company was lessee under leases, ending more than three years after that date, having an aggregate annual rental of approximately $2,150,000.[4]

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[1]Canada Dry Corporation, Annual Report, September 30, 1960, p. 17.

[2]Federated Department Stores, Inc., Annual Report, January 28, 1961, p. 18.

[3]Dresser Industries, Inc., Annual Report, October 31, 1960, p. 18.

[4]Air Reduction Company, Incorporated, Annual Report, December 31, 1960, p. 24.

R. H. Macy and Co., Inc.

At July 29, 1961, the Corporation held leases of more than three years, the rentals under which, for the year ending July 28, 1962, amount to $9,174,000 plus, in certain instances, real-estate and personal-property taxes, other expenses, and additional amounts based on percentages of sales. The leases provide for varying lease periods, including renewal privileges, to 2059. Taxes incurred under the leases are included with other taxes in the statement of earnings.[1]

Crown Zellerbach Corporation

Premises at various locations are leased under long-term agreements with expirations ranging from 1964 to 2000 and, in some instances, with renewal privileges at reduced annual rentals. Current annual rentals under these leases, exclusive of real property taxes and insurance, aggregate approximately $3,000,000; this includes ten premises leased under sale-and-lease-back agreements with rentals aggregating $2,375,000.[2]

Burroughs Corporation

The total minimum annual rentals payable by the Company and subsidiary companies under leases expiring after December 31, 1963, aggregate $1,920,000.[3]

Allied Stores Corporation

At January 31, 1961 the Corporation and its consolidated subsidiaries were lessees under 206 leases having terms of more than three years from that date. The rentals under these leases for the year ending January 31, 1962 amount to a minimum of $14,195,441 (of which $9,131,486 is payable to Alstores Realty Corporation and subsidiaries), plus in most cases, real estate

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[1]R. H. Macy and Co., Inc., Annual Report, July 29, 1961, p. 13.

[2]Crown Zellerback Corporation, Annual Report, December 31, 1960, p. 23.

[3]Burroughs Corporation, Annual Report, December 31, 1960, p. 16.

taxes and other expenses and, in certain instances, increased amounts based on percentage of sales. The aforementioned minimum annual rental grouped by lease expiration dates is as follows: $3,042,431 prior to 1980; $2,674,734 in 1981-1985; $3,058,116 in 1986-1990; $1,966,100 in 1991-2000; and $3,454,060 in 2001-2059.[1]

The American Hardware Corporation

The company is lessee under two leases expiring in 1973. Future rentals vary between $137,000 and $170,000 annually.[2]

Exhibits 10 and 11 summarize the information concerning the reporting of leases during the period 1949 through 1960. The first of these reflects the number of firms which reported lease details in varying degrees: whereas the second exhibit summarizes the same data in percentage terms. At first glance these summaries appear to indicate considerable improvement in the extent of disclosure over this twelve-year period. Only 46 companies set forth details of long-term lease agreements during 1949, whereas 117 companies showed details in their 1960 annual report. The number of companies indicating long-term leases (without mention thereof) by reference to leaseholds or leasehold improvements fell from 66 in 1952 (first year noted) to only 37 in 1960.

It is likely that some of this increase in reporting is really a reflection of the tremendous growth in leasing which was discussed in Chapter 2 rather than an actual improvement in the reporting. At any rate, a close examination of Exhibits 10 and 11 indicates that current reporting still leaves a great deal to be desired. For example, in the

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[1]Allied Stores Corporation, Annual Report, January 31, 1961, p. 19.

[2]The American Hardware Corporation, Annual Report, December 31, 1960, p. 15.

EXHIBIT 10

Number of Lessee Companies Disclosing Long-Term Leases
in Published Financial Statements
1949 thru 1960

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Setting forth details of long-term leases	46	39	61	74	84	82	91	62	91	93	104	117
Mentioning long-term leases but omitting details thereof	34	39	139	24	31	45	73	84	81	72	71	69
Indicating long-term leases (without mention thereof) by reference to leaseholds or leasehold improvements				66	66	105	50	55	53	51	49	37
Subtotal	80	78	200	164	181	232	214	201	225	216	224	223
Neither referring to nor indicating long-term leases	445	447	400	436	419	368	386	399	375	384	376	377
Total	525	525	600	600	600	600	600	600	600	600	600	600

Source: Accounting Trends and Techniques, 4th thru 15th editions (New York: American Institute of Certified Public Accountants).

EXHIBIT 11

Percentage of Lessee Companies Disclosing Long-Term Leases
in Published Financial Statements
1949 thru 1960

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Setting forth details	57.5	50.0	30.5	45.1	46.4	35.3	42.5	30.8	40.4	43.1	46.4	52.3
Mentioning but omitting details	41.5	50.0	69.5	14.6	17.1	19.4	34.1	41.8	36.0	33.3	31.7	30.9
Indicating by reference to leaseholds, etc.	--	--	--	40.2	36.5	45.3	23.4	27.4	23.6	23.6	21.9	16.6
Total referring to or indicating	100	100	100	100	100	100	100	100	100	100	100	100
Percentage of total firms surveyed by Accounting Trends which either referred to or indicated long-term leases	15.2	14.9	33.3	27.3	30.2	38.7	35.7	33.5	37.5	36.0	37.3	37.2

Source: Figures from Exhibit 10 expressed in percentage form.

year 1960 only 52 per cent of the companies that indicated long-term leases set forth details thereof. This is actually lower than the 58 per cent that set forth details in 1949. During the intervening years this percentage has varied between a high of 50 per cent in 1950 down to a low of 31 per cent in 1951 and again in 1956. This means that during this twelve-year period, well over half of the firms failed to disclose details of their lease agreements. The inadequacy of the information presented is more apparent in Chapter V where attempts have been made to utilize the meager data presented for purposes of financial analysis.

There seems to be little question that current reporting is deficient in certain respects. The above statistics would seem to bear this out. The cause of these deficiencies, however, is not quite so apparent. Some have said that requirements for reporting are themselves lacking. Others maintain that current requirements are satisfactory but that business managements have failed fully to comply with them. In order to evaluate these charges, let us take a look at the current rules for reporting of long-term lease agreements.

Two bodies, the American Institute of Certified Public Accountants and the Securities and Exchange Commission, have been largely responsible for establishing standards of reporting. The first pronouncement of the American Institute of Certified Public Accountants, on the subject of leasing, Accounting Research Bulletin 38, was issued in October, 1949. Substantially the same material was contained in Chapter 14 of Accounting Research Bulletin 43 which was issued in June, 1953. In regard to disclosure of long-term leases in the financial statements, Bulletin 43 states:

> 5. The committee believes that material amounts of fixed rental and other liabilities maturing in future years under long-term leases and possible related contingencies are material facts affecting judgments based on the financial statements of a corporation, and that those who rely upon financial statements are

entitled to know of the existence of such leases and the extent of the obligations thereunder, irrespective of whether the leases are considered to be advantageous or otherwise. Accordingly, where the rentals or other obligations under long-term leases are material in the circumstances, the committee is of the opinion that:

(a) disclosure should be made in financial statements or in notes thereto of:

(1) the amounts of annual rentals to be paid under such leases with some indication of the periods for which they are payable and

(2) any other important obligation assumed or guarantee made in connection therewith;

(b) the above information should be given not only in the year in which the transaction originates but also as long thereafter as the amounts involved are material; and

(c) in addition, in the year in which the transaction originates, there should be disclosure of the principal details of any important sale-and-lease transaction.

6. A lease arrangement is sometimes, in substance, no more than an installment purchase of the property.

. . . . . .

7. Since the lessee in such cases does not have legal title to the property and does not necessarily assume any direct mortgage obligation, it has been argued that any balance sheet which included the property among the assets and any related indebtedness among the liabilities would be incorrect. However, the committee is of the opinion that the facts relating to all such leases should be carefully considered and that, where it is clearly evident that the transaction involved is in substance a purchase, the "leased" property should be included among the assets of the lessee with suitable accounting for the corresponding liabilities and for the related charges in the income statement.[1]

In a footnote to Chapter 14, the committee states that: "Three years has been used as a criterion in some cases for classifying leases as short-term or long-term."[2]

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[1]American Institute of Certified Public Accountants, Accounting Research and Terminology Bulletins (final edition; New York: American Institute of Certified Public Accountants, 1961), pp. 126-127. Chapter 14 of Bulletin 43 is reproduced in full in Appendix IV.

[2]Ibid., p. 126.

Regulation S-X, Form and Content of Financial Statements, issued by the Securities and Exchange Commission, contains requirements for reporting similar to those prescribed by the American Institute of Certified Public Accountants. Rule 3-18 (Commitments) reads as follows:

> (a) If material in amount the pertinent facts relative to firm commitments for the acquisition of permanent investments and fixed assets and for the purchase, repurchase, construction, or rental of assets under long-term leases shall be stated briefly in the balance sheet or in footnotes referred to therein.
>
> (b) Where the rentals or obligations under long-term leases are material there shall be shown the amounts of annual rentals under such leases with some indication of the periods for which they are payable, together with any important obligation assumed or guarantee made in connection therewith. If the rentals are conditional, state the minimum annual amounts.[1]

Rule 3-19 (General Notes to Balance Sheets) states in part:

> If present in regard to the person for which the statement is filed the following shall be set forth in the balance sheet or in notes thereto:
>
> . . . . . .
>
> (g) Contingent liabilities.--A brief statement as to contingent liabilities not reflected in the balance sheet shall be made. In the case of guarantees of securities of other issues a reference to the appropriate schedule shall be included.[2]

While both the American Institute of Certified Public Accountants and the Securities and Exchange Commission seem to provide a great deal of latitude as to method of disclosure, the fact that both of them have failed to take a stand against footnote disclosure, has resulted in

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[1]United States Securities and Exchange Commission, Regulation S-X, Form and Content of Financial Statements (Washington, D. C.: U. S. Government Printing Office, 1961), p. 5.

[2]Ibid., pp. 5-6.

the almost universal adoption of this technique. Those companies that have reported long-term leases have generally done so in notes to the financial statements rather than in the body thereof.

Causes of Apparent Deficiencies

What are the causes of these deficiencies? Are the standards for reporting themselves deficient, or is it merely a case of failing to fully implement these standards? Actually, it appears that deficiencies exist in both of these areas.

Standards are Deficient

Current requirements are rather vague. For example, the phrase in Bulletin 43 which states "material in the circumstances" is not exacting and probably has resulted in the failure of many firms to disclose their leases.

The statement "disclosure should be made in the financial statements or in notes thereto" is another example. Since firms tend to report only the minimum amount of information necessary, they have almost universally adopted the footnote disclosure. It has been argued that if this was the intent of the Committee on Accounting Procedure, then it should have been stated more explicitly. The wording "in the balance sheet or footnotes referred to therein" as contained in Regulation S-X would also seem to leave room for choice of methods. However, the Securities and Exchange Commission will not allow a firm to include leases in the balance sheet totals.[1] If it was their intent to confine disclosure to the footnotes, then a statement to that effect would have been in order.

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[1]Letter from Andrew Barr, Chief Accountant, Securities and Exchange Commission, Washington 25, D. C., January 3, 1962.

Another criticism of current standards is that they do not require enough information to enable the reader to determine the full financial implications of leases. For example, none of the annual reports examined in this study contained sufficient information to enable the reader to capitalize the company's lease obligations in order to determine the present value of the obligation. The implications of this deficiency will be discussed in Chapter V and VI.

Standards Are Not Being Complied With

In addition to the fact that current requirements are apparently lacking, there is evidence that the standards which have been established have not been fully complied with. This is apparent in a study which was made by Lloyn Vann Seawell in which he examined a large number of corporate annual reports to determine the extent of compliance with practices suggested in the American Institute of Certified Public Accountants' Accounting Research Bulletins. Seawell's results in regard to long-term leases are reproduced in Exhibit 12.[1] Note that in each of the three years the non-compliance approached fifty per cent. In regard to the 1956 reports, Seawell followed up with letters to the auditors to have them "justify" the apparent non-compliance and adjusted his 1956 figures to reflect the result of the replies. The adjusted figure, however, still disclosed twenty-five per cent non-compliance. This study certainly indicates that current requirements are not being met.

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[1]The following criteria were established by Seawell for evaluating compliance with Chapter 14, Accounting Research Bulletin 43:

Criteria for Full Compliance. In order to earn a rating of Full Compliance, the presentation must have met all of the following criteria:

1. Disclosure must be made of the amounts of annual rentals to be paid under long-term leases.

Rationale Behind Current Practices

The current accounting practice of not including leased property among the firm's assets or the related lease obligations as liabilities is based upon three main legal arguments. In the first place, it is argued that legal title to the leased property rests with the lessor and that any attempt to include it on the balance sheet would be erroneous and would misstate the legal facts.

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2. Disclosure must be made of the term of the leases or their expiration dates.
3. Disclosure must be made of obligations assumed or guarantees made in connection with long-term leases, or statements are made indicating that no important obligations were assumed and that no important guarantees were made.
4. Disclosure must be made of annual rentals, term of the leases or their expiration dates, obligations assumed, and guarantees made in each year subsequent to the year in which the contracts originated.
5. Disclosure must be made, in the year in which the contracts originate, of the principal details of the Sale-and-lease-back transaction.
6. Where it is clearly evident that the contracts are in substance purchase arrangements, the "lease" properties must be included among the assets of the lessee with suitable accounting being adopted for the related liabilities and payments to the "lessor."

Criteria for Apparent Compliance. An evaluation of Apparent Compliance was given to those presentations which met all requirements of Full Compliance except that no disclosure was made of obligations assumed or guarantees made in connection with long-term leases, nor was there any indication of the existence of such obligations or guarantees.

Criteria for Non-Compliance. An evaluation of Non-Compliance was given to those presentations which apparently violated any one of the six Full Compliance criteria. The Non-Compliance rating was given in those instances where the balance sheet disclosed "leasehold improvements," but failed to disclose additional information relating to rentals and term of leases.

Criteria for Apparent Non-Coverage. The rating of Apparent Non-Coverage was given to those annual reports which gave no indication of there being any long-term leases in the company's operations. It is probable that long-term leases existed in certain instances, but were not disclosed in the annual reports. It was deemed impracticable to attempt to determine the extent of such omissions.

EXHIBIT 12

Evaluation of Compliance With AICPA Research Bulletins Regarding Reporting of Long-Term Leases*

Evaluation Rating	1954		1955		1956	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Full compliance	30	44.1	33	47.1	32	48.4
Apparent compliance	4	5.9	5	7.1	3	4.5
Non-compliance	34	50.0	32	45.8	31	47.1
Totals	68	100.0	70	100.0	66	100.0
Apparent non-coverage	187		185		189	
Totals	255		255		255	

*Source: Lloyn Vann Seawell, "An Evaluation of Selected Industrial Corporation Annual Reports for Compliance with Accounting Research Bulletins of the AICPA's," unpublished D.B.A. dissertation, School of Business, Indiana University, 1958.

The second legal argument in favor of current accounting practice relates to the manner in which other contractual obligations are treated in the books of account. Under current accounting treatment, these obligations are not recorded in the books or shown in the financial statements except insofar as they represent claims against goods or services which have already been received. For example, employment contracts, material and equipment purchase contracts, construction contracts, pension and retirement plans, royalty obligations, and other contracts, all of which are legal and binding obligations, are typically not regarded as "debt" and do not constitute "liabilities" as the terms are usually used in the balance sheet. The similarity between the lease obligation and other contractual agreements may be seen from the following statement by the vice-president of a New England bank:

> It has been aptly suggested that there is no more excuse for cluttering up the balance sheet with . . . leases than for doing the same thing with future obligations to pay wages -- a commitment similar in that both will be paid only if the company stays in business.[1]

The senior editor of Dun and Bradstreet, Inc., emphasized this same point in a personal letter in which he stated:

> We never adjust the financial statements to reflect leases any more so than we would adjust the balance sheets to reflect potential future charges to earnings on account of payrolls, administrative salaries or other long-term charges incurred under the normal operation of a business.
>
> Contrary to feeling that of [sic] such lease obligations should be shown as liabilities, we can only conclude that to show an obligation incurred under long-term contract as an obligation may serve only to mislead and confuse. While it is true that a lease implies a future obligation, such an obligation would be liquidated in fact out of income and not out of assets. If the terms

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[1]Bennett R. Keenan, "Financing a Leasing Corporation," a paper submitted in partial fulfillment of the requirements of The Stonier Graduate School of Banking conducted by the American Bankers Association at Rutgers University, June, 1960, p. 14.

> of a lease are not going to be met later on, it is either because the concern itself has become insolvent in which case the entire matter of obligation incurred is up in the air or the lease is going to be transferred under subleasing arrangements.
>
> I do not presume to speak for the Dun & Bradstreet Organization officially on this matter. Accounting methods and techniques are not in our province. However, I can point out that the problem of financial analysis would be complicated if accountants generally were to follow through with this proposed change. If a lease-hold obligation is to be shown as a debt than [sic] it would be presumed that the income from which the lease-hold terms are to be met would be shown as an asset.[1]

The third argument upon which current practices rests relates to the differences between debt and lease obligations as recognized by the courts of law. Most leases provide that in the event of default on any of the lease provisions the entire amount of rent payable under the lease shall be immediately due and payable. However, in spite of these default provisions, the courts have usually refused to recognize the claims of the lessor for the total amount of unpaid rentals. In the case of Kothe, Trustee, v. R. C. Taylor Trust the Supreme Court of the United States ruled that such an amount was ". . . so disproportionate to any damage reasonably to be anticipated . . . that we must hold the provision is for an unenforceable penalty."[2] Similarly, in the case of the Commissioner of Insurance v. Massachusetts Accident Company the court ruled that ". . . where a lease contains many covenants of varying importance . . . the sum designated to be paid upon a breach of any of these covenants is a penalty and not liquidated damages."[3]

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[1]Letter from Richard Sanzo, Senior Editor, Business Education Division, Dun and Bradstreet, Inc., New York 16, New York, November 27, 1961.

[2]280 U.S. 224 (1930).

[3]310 Mass. 769, 39 N.E. 2d. 664 (1942).

In those instances where a firm that is bankrupt defaults on a lease, the Bankruptcy Act governs the amount of the lessor's claim. In the event of reorganization under Chapter Ten, the act provides that:

> The claim of the landlord for injury resulting from the rejection of an unexpired lease of real estate or for damages or indemnity under a covenant contained in such lease shall be provable, but shall be limited to an amount not to exceed the rent, without acceleration, reserved by such lease for the three years next succeeding the date of the surrender of the premises to the landlord or the date of reentry of the landlord, whichever first occurs. . . .[1]

Similarly, in the event of bankruptcy the act provides:

> That the claim of a landlord for damages for injury resulting from the rejection of an unexpired lease of real estate or for damages or indemnity under a covenent contained in such lease shall in no event be allowed in an amount exceeding the rent reserved by the lease, without acceleration, for the year next succeeding the date of the surrender of the premises to the landlord or the date of reentry of the landlord, whichever first occurs. . . .[2]

Presumably, the lessor would likewise be limited to damages in the case of chattel leases and would not be permitted to recover the entire unpaid rental.[3] These differences in the event of bankruptcy are made clear in the following statement:

> A lease has, to be sure, certain elements also found in debt: it is a promise to pay a fixed amount over a certain period. It lacks, however, one feature of debt, at least, that to a creditor should explode any notion that a lease is debt. In the event of bankruptcy of the debtor, a debt is normally recognized in full as a claim; in bankruptcy of a lessee this is not the case.[4]

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[1]Section 202, Chapter 10, The Bankruptcy Act.

[2]Section 63a(9), Chapter 7, The Bankruptcy Act.

[3]Alvin Zises, "Disclosure of Long-Term Leases," The Journal of Accountancy, Vol. CXI (February, 1961), p. 39.

[4]Keenan, op. cit., p. 15.

In summary, the proponents of not disclosing long-term leases in the body of the balance sheet rest their case primarily on legal grounds. In respect to the leased property, they point out that legal title rests in the lessor and, therefore, it cannot be shown among the assets of the lessee. As to the obligation, they state that although the contract is legal and binding, the courts will not regard it as fixed in amount in the event of financial difficulty and therefore it should not be shown as a liability of the lessee. They also point out that many other obligations are similarly not shown on the balance sheet.

While this group generally admits some inadequacy in current reporting of long-term lease agreements, they feel that the solution lies in expanding footnote disclosure rather than abandoning it. They suggest that the American Institute of Certified Public Accountants, the Securities and Exchange Commission and other interested bodies determine what information is desired. When this information is specified, footnotes can readily be expanded for its inclusion. Current inadequacy, they say, is due only to incomplete directions.

CHAPTER IV

PROPOSED CHANGES IN FINANCIAL STATEMENT REPORTING

Proposed Changes

The inadequacies in current reporting of long-term leases which were discussed in Chapter III have suggested that footnote disclosure is inadequate and should be abandoned. Three alternative proposals have been suggested: preparation of a supplementary schedule of contractual commitments, capitalization of the lease rentals with the amounts shown short, and capitalization of the lease rentals with the amounts included in the balance sheet totals.

Supplementary Schedule

The first major proposal for improving current reporting calls for the preparation of a separate schedule. Under this form of reporting, the leases would be only mentioned in the body of the financial statements (no amounts) with a reference to a separate schedule on which the required details would be shown. Alvin Zises, President of Bankers Leasing Corporation, has suggested this type of disclosure. His "Schedule of Material Contractual Commitments (S-X Rules 3:18 and 3:19)" is reproduced as Exhibit 13.

The supplementary schedule approach has received the support of a number of groups, including the Financial Analysts Federation. In a personal letter, William C. Trapnell made the following statement:

Exhibit 13

Schedule of Material Contractual Commitments (S-X Rules 3.18 and 3.19)

Type of Commitment	*Amount Paid this Year*	*Amounts Contracted or Estimated for Each of Next 5 Years and for Each of Three 5-Year Periods Beyond*								*Minimum Amount of Commitment if Determinable**	*Remaining Period (yrs.) from Date of Report*
		Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*	*Years 6-10*	*Years 11-15*	*Years 16-20*		
Purchase and Repurchase for:											
(a) Investments											
(b) Fixed Assets											
(c) Inventory and Supplies											
(d) Other											
Construction											
Long-Term Leases											
Royalties											
Pension and Retirement											
Employee Contracts											
Guarantees											
Contingent Liabilities											
Other (Explain)											
Totals											

*The minimum balance payable, in each type of commitment, may be discounted over the remaining period by a stated per annum percentage. Where such minimum balance is discounted, state the percentage used in each case.

Where amounts both paid and payable for any type of commitment are not material, a statement to that effect for any such type of commitment will suffice. Show amounts separately for each type of commitment if amounts paid or payable are material.

Any pertinent information of a material nature regarding any commitment should be furnished within footnotes to the schedule.

Taken from Alvin Zises, "Disclosure of Long-Term Leases," The Journal of Accountancy, Vol. CXI (February, 1961), p. 45. Reproduced by permission of the author.

> The Government Relations Committee of the Financial Analysts Federation, of which I am Chairman, has taken a position opposing the capitalization method and favoring a supplementary schedule. We intend to recommend to the S.E.C. that such a schedule be required in registration statements and current reports, but we are withholding the preparation of any specific proposals pending the release of a research report on the general problem for the American Institute of Certified Public Accountants prepared by Professor John Myers of Northwestern University.
>
> We have talked informally with members of the S.E.C. staff about this matter and I believe that some of them are sympathetic with our attitude. However, I do not know what formal position the Commission or any of its departments may take. Generally speaking, investors, as represented by financial analysts, want more adequate disclosure without tampering with the balance sheet, while the capitalization proposal is backed only by the group of accountants and by some investment bankers and academicians. Business, on the other hand, does not want additional reporting burdens. One of our problems is to suggest a schedule which will not be unduly burdensome, yet will provide sufficient information for an accurate evaluation of financial condition.[1]

Such a schedule would certainly be an improvement over current practice. However, it would fail to overcome most of the criticisms of footnote disclosure. After all, schedules are really just an expanded form of footnotes; and, where one is inadequate, the other can hardly solve the problem. Supplementary schedules would be acceptable to most persons who favor current methods of disclosure but would not be acceptable to those who favor capitalization. There is no more reason for showing leases in a separate schedule than there is for doing the same thing with cash. Both items have a profound effect on the balance sheet and should be included therein.

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[1]Letter from William C. Trapnell, Second Vice-President and Secretary, Provident Mutual Life Insurance Company of Philadelphia, and Chairman of the Government Relations Committee of the Financial Analysts Federation, September 27, 1961.

Capitalization with Amounts Shown Short

The second major proposal for improving current reporting would be to capitalize the leases and include them in the body of the balance sheets with the amounts shown "short." Capitalization would be accomplished by discounting the total rentals payable under the lease to their present value. The capitalized figure would be shown under the caption "Property, Plant and Equipment," among the firm's assets. The corresponding credit would be shown in the liability section of the balance sheet, segregated according to "current" and "long-term" portion. These figures would then be double ruled and would not be included in any of the totals of the statement. An example of the "short" procedure is seen in the annual report of the Fairbanks Whitney Corporation which is reproduced in Exhibit 14.

This proposal is acceptable to the Securities and Exchange Commission, while capitalization with the amounts included in totals is not. Arthur Andersen and Company suggest that this technique ". . . is preferable to footnote disclosure, and might be justified as a step in the transition to the proper recording of lease obligations [which they feel is by capitalization]."[1]

However, the "short" technique is completely unsatisfactory and actually may be misleading. At first glance it appears that the leases have been included, and it is only after careful examination (and the help of an adding machine) that the reader finds they are just there for "looks." The average reader of a financial statement is not accustomed to checking its mathematical accuracy. When he sees a figure on a balance sheet, along with the opinion of a Certified Public Accountant, he assumes that the figure "counts" and he has every right to assume just that.

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[1]Arthur Andersen & Co., Accounting and Reporting Problems of the Accounting Profession (New York: Arthur Andersen and Co., 1960), p. 25.

EXHIBIT 14

FAIRBANKS WHITNEY CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET — DECEMBER 31, 1960 AND 1959

Assets

		1960	1959
Current assets:			
Cash		$ 12,037,665	$ 14,400,609
Government securities, at cost		179,586	1,182,516
Receivables, less reserve of $551,331 and $535,755, respectively		28,053,149	24,825,856
Inventories, at lower of cost (first-in, first-out basis) or market—			
Raw materials and supplies		8,491,477	9,415,445
Work in process and finished parts		35,928,147	37,329,663
Finished goods		7,917,651	10,164,379
Total inventories		$ 52,337,275	$ 56,909,507
Prepaid expenses		1,330,354	1,077,880
Total current assets		$ 93,938,029	$ 98,396,368
Property, plant and equipment, at cost		$ 91,301,072	$ 91,144,470
Less—Reserves for depreciation, depletion and amortization		47,250,548	45,459,699
		$ 44,050,524	$ 45,684,771
Rights to use of leased facilities, at December 31, 1960, at discounted amount of related long-term rental obligations—see contra	$12,700,000		
Other assets:			
Mortgages and notes receivable		$ 2,729,248	$ 2,879,411
Investments in joint ventures		1,509,278	830,620
Government securities, pledged as security		125,972	340,608
Debt discount and other deferred charges		840,901	835,236
		$ 5,205,399	$ 4,885,875
		$143,193,952	$148,967,014

Liabilities

	1960	1959
Current liabilities:		
Loans payable, less $400,000 cash collateral, secured by 40,000 shares of Fairbanks, Morse & Co. common stock, and notes payable	$ 7,015,817	$ 2,900,000
Accounts payable	8,728,974	8,129,375
Accrued expenses	6,245,465	7,205,825
Current maturities of long-term debt	2,125,999	2,184,200
Reserve for Federal and foreign income taxes	2,599,667	3,284,212
Total current liabilities	$ 26,715,922	$ 23,703,612
Reserves and deferred credits:		
Deferred Federal income taxes	$ 2,050,120	$ 1,755,144
Reserves for losses on long-term leases, etc.	4,795,087	5,461,307
Minority interest in subsidiary companies	7,905,795	8,688,779
	$ 14,751,002	$ 15,905,230
Long-term debt, excluding amounts due within one year (Note 2)	$ 31,793,125	$ 39,115,480
Rental obligations under long-term leases, at December 31, 1960, discounted over period of leases, (including $808,000 due within one year) see contra.	$12,700,000	
Capital stock (Notes 3 and 4) and surplus (Note 1):		
Cumulative preferred stock, par value $40 per share, authorized 369,672 shares, outstanding 369,372 shares, after deducting 300 shares in treasury, at December 31, 1960	$ 14,774,880	$ 14,787,040
Common stock, par value $1 per share, authorized 10,000,000 shares, outstanding 7,436,608 shares, after deducting 178,009 shares in treasury, at December 31, 1960	7,436,608	7,436,602
Capital surplus	47,683,225	66,312,468
Earned surplus (deficit)	39,190	(18,293,418)
	$ 69,933,903	$ 70,242,692
	$143,193,952	$148,967,014

Capitalization with Amounts Included in Totals

The third and most significant proposal provides for the capitalization of lease rentals and for inclusion of these amounts in the body of the balance sheet as well as in the totals thereon. Because this proposal provides the best solution to the problem of inadequate reporting of long-term leases, the remainder of this dissertation will be devoted thereto. From here on, the term "capitalization" will be used to refer strictly to this proposal and will not include the "short" technique described previously.

Selection of Interest Rate

Capitalization is accomplished by discounting the rentals payable during the term of the lease to their present value at some "implied rate" of interest. The selection of the "true rate" implied in the lease is of paramount importance and is essential to assure accurate capitalization. Although a number of rates may be discussed during the lease negotiations, the "true rate" is often concealed. Nevertheless, it can easily be computed by comparing the cost (or cash price) of the asset with the total rental payable over the term of the lease. The difference between these two figures represents interest. If this amount is divided by the number of years the lease will run, the quotient represents the average interest. When this latter amount is divided by the average investment, the result represents the annual rate of interest. The ease of computing this implicit interest rate may be seen by looking at the following lease:

> A plant was built by the XYZ Company to its specifications at a cost of $5,600,000. The building had an estimated useful life of 40 years. Upon completion, the building was sold at cost to an insurance company under a sale-and-lease-back agreement. The lease had an original noncancelable term of twenty years during which it called for annual rentals of $420,000. The XYZ

> Company had options to renew the lease for an additional forty years at the following reduced rentals: first 5-year renewal at $196,000 per year; second 5-year renewal at $168,000 per year; next six renewals of 5 years each at $112,000 per year.[1]

Utilizing the above information, we find that total rent payments over the initial term of the lease will amount to $8,400,000. This amount will include $5,600,000 return of investment plus $2,800,000 interest. The average interest over this twenty-year period will amount to $140,000 per year ($2,800,000 ÷ 20 years) while the average investment will be $2,940,000 ([$5,600,000 + $280,000] ÷ 2). The interest rate implied by these calculations would be 4.76 per cent.

The above calculations, however, have ignored a very important part of the interest. Under the provisions of the lease agreement, the lessor will own the building at the end of the twenty-year period and the XYZ Company will have continued use of the building after that date only by paying additional rentals.[2] In other words, in order to have use of the building during its entire useful life (estimated at forty years) the XYZ Company must pay $2,940,000 in addition to the $8,400,000 paid over the initial term of the lease. Since this is an amount in excess of the principal, it represents additional interest.[3] The total payments

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[1]This example is based on an actual lease. Only the name of the lessee is fictitious.

[2]Of course, the XYZ Company has the option of abandoning the property at the end of the initial twenty-year period. If it does this, however, it is giving up the use of an asset which it has already paid for and which has a remaining life of twenty years. This means that the lessee in effect will be required to make an additional rental payment at the end of the twentieth year which will be equal to the fair market value of the property at that date.

[3]The intent of the lessee at the time the lease is negotiated should govern the treatment used. If he intends to lease the building for its entire useful life, then the rentals paid during the periods of renewal should be treated as additional interest. If the lessee intends to lease the property for only a portion of its useful life, then the estimated fair market value of the property at the date the lease is to be terminated

required to have use of the building during its entire useful life will amount to $11,340,000. These payments will include $5,600,000 return of principal and $5,740,000 interest. The interest rate implied by these calculations is 5.61 per cent.[1] This rate represents the true interest rate implied in the above lease agreement.

Accounting Entries

The present value of the lease rentals (which will always equal the cost or cash price of the asset at the beginning of the lease term) is placed on the books by the following entry:[2]

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should be treated as additional interest. In the illustration used here, the entire useful life of the building was assumed to be applicable. The renewal options beyond this estimated useful life were ignored because these options will never be exercised based upon current estimates.

[1]The computation of the implied interest rate is more complex than it was under the previous illustration inasmuch as the rentals are not uniform over the duration of the lease. The interest rate is computed by use of the following formula:

$$\$5,600,000 = \$420,000\left(\frac{1-\frac{1}{(1+i)^{20}}}{i}\right) + \$196,000\left[\left(\frac{1-\frac{1}{(1+i)^{25}}}{i}\right) - \left(\frac{1-\frac{1}{(1+i)^{20}}}{i}\right)\right]$$

$$+ \$168,000\left[\left(\frac{1-\frac{1}{(1+i)^{30}}}{i}\right) - \left(\frac{1-\frac{1}{(1+i)^{25}}}{i}\right)\right]$$

$$+ \$112,000\left[\left(\frac{1-\frac{1}{(1+i)^{40}}}{i}\right) - \left(\frac{1-\frac{1}{(1+i)^{30}}}{i}\right)\right]$$

[2]The account titles used in the illustrative journal entries are those suggested by Arthur Andersen and Company in their publication Accounting and Reporting Problems of the Accounting Profession.

Dr. Rights to use of leased property	$5,600,000	
Cr. Rental obligations under long-term leases		$5,600,000

The account "Rights to use of leased property" should be shown on the balance sheet as a fixed asset and the balance in that account should be amortized over the term of the lease, just as other fixed assets would be depreciated. The periodic entry required to accomplish the amortization is as follows:

Dr. Rent Expense -- leased property	$140,000	
Cr. Rights to use of leased property		$140,000

The account "Rental obligations under long-term leases" would be shown on the balance sheet as a liability. The portion payable within a year would be listed under the "current" caption and the remainder would be carried under "long-term" liabilities. The lease liability account would be adjusted at the end of the year and the periodic interest recorded by the following entry:[1]

Dr. Rental obligations under long-term leases	$105,858	
Dr. Interest charges	314,142	
Cr. Accrued rent payable		$420,000

The liability established in the above entry would be liquidated at the time the rentals are paid. Each rent payment would thus include an element of principal and an element of interest. The entry to record the periodic rental payment is as follows:

Dr. Accrued rent payable	$420,000	
Cr. Cash in bank		$420,000

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[1]The amounts shown here are applicable the first year only. The entry, however, would remain the same from year to year with only amounts changing due to the declining balance of the lease liability.

The journal entries that would be required over the entire forty-year period based upon the capitalization technique described previously are summarized in Exhibit 15. Note that the lease transaction has been separated into its operational and financial elements. The cost of the lease asset is spread over its expected useful life (forty years) in some systematic manner. The method of amortization which has been used here is the straight line method, but this has no bearing on the theory presented. Any acceptable method of amortization could have been used with equal application. The significant point is that the amortization of the asset has no relationship to the method of financing employed.

The lease rentals have been applied first to interest and then to principal in accordance with the U. S. Rule. The interest charges were computed by applying the implicit rate of interest (5.61 per cent) times the declining balance of the lease liability.

Rationale Behind Capitalization

Capitalization is not a proposal which has evolved independently of accounting theory and which "strikes at the very foundation of accounting," as some have charged. In fact, quite the reverse is true. The proposal actually has its roots deeply implanted in the body of accounting theory and closely parallels the treatment which is given similar financial transactions.

The Nature of Accounting

Before considering the reasoning behind the capitalization proposal, it is essential to have an understanding of the nature of accounting. The Committee on Accounting Terminology of the American Institute of Certified Public Accountants has defined accounting as follows:

EXHIBIT 15

Journal Entries Required Under Capitalized XYZ Company Lease
for Forty-Year Term

End of Year	Rent (Depr.) Exp.	Lease Asset	Interest Chgs.	Lease Liability	Cash	Remaining Balance in Lease Liability Acct.
0		$5,600,000		<$5,600,000>		
1	$140,000	<140,000>	$314,142	105,858	<$420,000>	$5,494,142
2	140,000	<140,000>	308,204	111,796	<420,000>	5,382,346
3	140,000	<140,000>	301,932	118,068	<420,000>	5,264,278
4	140,000	<140,000>	295,309	124,691	<420,000>	5,139,587
5	140,000	<140,000>	288,314	131,686	<420,000>	5,007,901
6	140,000	<140,000>	280,927	139,073	<420,000>	4,868,828
7	140,000	<140,000>	273,125	146,875	<420,000>	4,721,953
8	140,000	<140,000>	264,886	155,114	<420,000>	4,566,839
9	140,000	<140,000>	256,185	163,815	<420,000>	4,403,024
10	140,000	<140,000>	246,995	173,005	<420,000>	4,230,019
11	140,000	<140,000>	237,290	182,710	<420,000>	4,047,309
12	140,000	<140,000>	227,041	192,959	<420,000>	3,854,350
13	140,000	<140,000>	216,217	203,783	<420,000>	3,650,567
14	140,000	<140,000>	204,785	215,215	<420,000>	3,435,352
15	140,000	<140,000>	192,712	227,288	<420,000>	3,208,064
16	140,000	<140,000>	179,962	240,038	<420,000>	2,968,026
17	140,000	<140,000>	166,497	253,503	<420,000>	2,714,523
18	140,000	<140,000>	152,276	267,724	<420,000>	2,446,799
19	140,000	<140,000>	137,257	282,743	<420,000>	2,164,056
20	140,000	<140,000>	121,397	298,603	<420,000>	1,865,453

21	140,000	<140,000>	104,646	91,354	<196,000>	1,774,099
22	140,000	<140,000>	99,521	96,479	<196,000>	1,677,620
23	140,000	<140,000>	94,109	101,891	<196,000>	1,575,729
24	140,000	<140,000>	88,393	107,607	<196,000>	1,468,122
25	140,000	<140,000>	82,357	113,643	<196,000>	1,354,479
26	140,000	<140,000>	75,982	92,038	<168,000>	1,262,441
27	140,000	<140,000>	70,819	97,181	<168,000>	1,165,260
28	140,000	<140,000>	65,367	102,633	<168,000>	1,062,627
29	140,000	<140,000>	59,610	108,390	<168,000>	954,237
30	140,000	<140,000>	53,530	114,470	<168,000>	839,767
31	140,000	<140,000>	47,108	64,892	<112,000>	774,875
32	140,000	<140,000>	43,468	68,532	<112,000>	706,343
33	140,000	<140,000>	39,624	72,376	<112,000>	633,967
34	140,000	<140,000>	35,563	76,437	<112,000>	557,530
35	140,000	<140,000>	31,276	80,724	<112,000>	476,806
36	140,000	<140,000>	26,747	85,253	<112,000>	391,553
37	140,000	<140,000>	21,965	90,035	<112,000>	301,518
38	140,000	<140,000>	16,914	95,086	<112,000>	206,432
39	140,000	<140,000>	11,580	100,420	<112,000>	106,012
40	140,000	<140,000>	5,947	106,053	<112,000>	-41

> Accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof.[1]

It is important to note that the committee regards accounting as an art, not a science. What we call "principles of accounting," then, are not eternal laws which must endure forever but rather temporary guides which should evolve with the development of the art.

A second point that is essential to the reasoning contained herein is that accounting is a profession. Although this is a debatable point, it is not within the scope of this study.[2] We shall assume here that the certified public accountant does act in a professional capacity in rendering an opinion of the adequacy of financial statements. He is holding himself out to the public as an expert in his field. In spite of the fact that his "certificate" does not constitute a guarantee, it is nevertheless regarded as authoritative. This means that the C.P.A. must not be swayed by what special interest groups might suggest is for the public welfare but must prescribe that which his professional training and experience dictates.

Actually, the financial statements issued by a firm are the representations and responsibility of its management. The statements are usually prepared by industrial accountants who often are not certified. The statements are then presented to a public accountant who, in

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[1]American Institute of Certified Public Accountants, Accounting Research and Terminology Bulletins, p. 9.

[2]Some excellent articles have been written on this subject. See for example: A. B. Carson, "Profile of a Profession," The Journal of Accountancy, Vol. XCVII (January, 1959); E. Michael Howarth, "General Recognition of Accountancy as a Profession," Canadian Chartered Accountant, Vol. LXIX (December, 1956); A. C. Littleton, "Characteristics of a Profession," New York Certified Public Accountant, Vol. XXII (April, 1952); and Charles P. Rockwood, "The Changing Image of a Profession," The Journal of Accountancy, Vol. CX (October, 1960).

connection with an audit of the books of account, is asked to render an opinion regarding the fairness of the presentation of the financial statements. Even though these statements are actually not presented by the C.P.A., he nevertheless holds veto power over them. In deciding what information the financial statements should contain, the industrial accountant must look closely at the standards employed by the C.P.A. No alert management would present financial statements for a professional opinion unless they felt the statements would pass the scrutiny of the C.P.A. For this reason, it is the certified public accountants and the national organization which speaks for them that must assume responsibility for financial statement deficiencies.

It is in this framework that the movement to change techniques for lease reporting has evolved--first, that accounting is an art and is not based upon a body of irrevocable rules; and second, that accounting is a profession, capable and qualified to meet the changing needs of business. Donald R. Gant, placed the responsibility directly where it belonged when he stated:

> If there is to be any broad change, the impetus must come from the group which, by failing to take action up until now, has allowed the problem to reach its present proportions--the public accounting profession.
>
> The vital role which accounting plays in the decisions of both corporate financial managers and investors cannot be denied. But it is also true that the accountant's devotion to maintaining a thread of consistency from year to year often makes changes in "generally accepted accounting principles" slow in coming about, with the result that these principles are sometimes in conflict with economic logic. And certainly the soundness of financial policy which subordinates common sense to accounting convention must be questioned.
>
> Yet this appears to be the principal explanation for the trend toward lease financing. Accounting standards which were appropriate for the treatment of commercial leasing have proved wholly inadequate to cope with the growing challenge offered by the adaptation of the lease as a financing instrument. Out of these

> inadequacies has come a curious kind of logic which argues that the existence of an asset can be determined or denied by a ledger entry, and that a promise to pay becomes an obligation only if it is reflected in figures on a balance sheet.
>
> This sort of rationalization may serve to ease the conscience of a management that is opposed to debt, or that has seen the amount of its debt climb to a disturbing level. But, unfortunately, it ignores certain basic economic facts of life. Every business requires certain fixed assets, and the choice available to it is not whether to finance these assets but how to finance them. Lease financing is one way of acquiring assets, but it is a form of borrowing--in most cases, a very expensive form.
>
> Like all types of borrowing, lease obligations draw on the credit of the borrower, and credit is not a bottomless well. If it is used in one form, it is not available to be used again in another. Accounting deficiencies may have made it possible for some companies to have their cake and eat it, too; however, there is reason to believe that the advantage will be short-lived. There is evidence of a growing awareness among investors and financial analysts of the significance of lease commitments, and this must inevitably be reflected in accounting changes.[1]

The Nature of the Lease

In accepting this challenge, the advocates of capitalization have suggested a plan which would look through the legal details of the lease and record the transaction according to the logic dictated by the financial and economic facts. Capitalization recognizes the fact that leasing is just another means of financing, similar in many respects to debt financing. This view may be summarized as follows:

> . . . it should be apparent that a lease or leaseback is nothing more than another form of financing, albeit an expensive one in many cases. When one enters into a lease or leaseback contract, the action taken is equivalent to borrowing money, and, in effect, the lease liability is tantamount to long-term debt. In proper perspective, it could really be regarded as an integral

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[1]Donald R. Gant, "Illusion in Lease Financing," Harvard Business Review, Vol. XXVII (March-April 1959), p. 142.

> part of the capital structure. Yes, entering a lease or leaseback is substantially the same thing as borrowing money. Certainly the credit strength of the enterprise is dissipated just as quickly and just as effectively through the entering of lease hold commitments as it is through the addition of debt. Through the eyes of the critical analyst, there is little difference between the two, i.e., debt and lease liabilities, and both result in fixed charges in which the essential ingredients are depreciation and interest.[1]

Exhibit 16 compares some of the more common characteristics of a lease with those found in a typical bond agreement. Note that each provision in the financial lease has its counterpart in the bond agreement.

The leasing companies themselves have recognized the similarities between leasing and borrowing and accordingly have in many instances placed restrictive provisions in their lease agreements which are comparable to those found in conventional debt instruments. Examples of these restrictive provisions in the debt and lease agreements of major airlines are included in Appendix V.

Capitalization and the Balance Sheet

Inclusion of the account "rights to use leased property" among the firm's assets as suggested earlier in this chapter would seem to be within the scope of the American Institute of Certified Public Accountants' definition of the term "asset" which follows:

> The word asset, is not synonymous with or limited to property but includes also that part of any cost or expense incurred which is properly carried forward upon a closing of books at a given date. Consistently with the definition of balance sheet previously suggested, the term asset, as used in balance sheets, may be defined as follows:
>
> > Something represented by a debit balance that is or would be properly carried forward upon a closing of books of account according to the rules or principles of accounting (provided such debit balance is not in effect a negative

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[1]Ronello B. Lewis. Financial Analysis for Management (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959), pp. 161-162.

EXHIBIT 16

Comparison of Similar Lease and Bond Provisions

Lease Provision	Comparable Bond Provision
1. Leasing is a source of capital.	1. Bonds are a source of capital.
2. Lease requires periodic payments for a fixed period of time. These payments contain two elements: (a) Return of investment. (b) Return on investment. (Since the lease is normally "net," the return can be calculated at a fixed rate in advance).	2. Bonds require periodic payments for a fixed period of time. These payments contain two elements: (a) Sinking fund payment or a serial maturity (return of investment). (b) Periodic interest (return on investment). This return can also be calculated at a fixed rate in advance.
3. Leases often contain a "rejectable offer" clause which enables the lessee to "retire" the lease early.	3. Bonds often contain a "call" provision which gives the borrower the right to retire them prior to maturity.
4. The primary security behind the lease is normally the general credit of the lessee rather than the value of the leased property.	4. The primary security behind a bond issue is also the general credit standing of the borrower. Mortgaged or pledged property is only of secondary importance.

> balance applicable to a liability), on the basis that it represents either a property right or is properly applicable to the future. Thus, plant, accounts receivable, inventory, and a deferred charge are all assets in balance-sheet classification.
>
> The last named is not an asset in the popular sense, but if it may be carried forward as a proper charge against future income, then in an accounting sense, and particularly in a balance-sheet classification, is an asset.[1]

As with other assets, the "rights to use of leased property" is recorded at cost. In the case of a lease, "cost" represents the total rental payments over the life of the asset less the implicit interest contained therein, i.e., the payments made for the right to use the property without regard to charges which are associated with the method of financing the acquisition of this right. In the case of a sale-and-lease-back agreement, "cost" is the total amount paid to construct the asset itself. In other cases, "cost" is equal to the cash price of the asset. Such a practice is identical to the treatment which would be given the asset if it were purchased from funds supplied by a more conventional form of financing and is in complete harmony with the fundamental concept of cost.

Likewise, including the account "rental obligations under long-term leases" as a liability would seem to fit the definition of the term "liability." The American Institute of Certified Public Accountants' Committee on Terminology has given the following definition:

> Similarly, in relation to a balance sheet, liability may be defined as follows:
>
> > Something represented by a credit balance that is or would be properly carried forward upon a closing of books of account according to the rules or principles of accounting, provided such credit balance is not in effect a negative balance applicable to an asset. Thus the word is used

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[1]American Institute of Certified Public Accountants, Accounting Research and Terminology Bulletins, p. 13.

> broadly to comprise not only items which constitute liabilities in the popular sense of debts or obligations (including provision for those that are unascertained), but also credit balances to be accounted for which do not involve the debtor and creditor relation. For example, capital stock and related or similar elements or proprietorship are balance-sheet liabilities in that they represent balances to be accounted for, though these are not liabilities in the ordinary sense of debts owed to legal creditors.[1]

The advocates of capitalization feel that the financial statements would be more meaningful if the assets and liabilities arising from lease agreements were included therein. By reflecting these financial facts in the books of account, the financial statements would become more useful to the analyst. The need for such a revision is made clear in the following statement by a partner of a large investment dealer:

> Unfortunately, lease liabilities are not found in the capital structure as stated on the books, and this is a serious shortcoming of present-day balance sheets. But every competent analyst and every creditor or potential creditor knows that leaseholds belong on the asset side of the balance sheet and lease liabilities belong on the liability side, and in appraisal these balance sheet adjustments are entered mentally. Certainly no banker or potential lender would be willing to appraise the statements in any other light. So, in reality, money provided by an owner-landlord under a lease or leaseback is an essential part of capital and should be so regarded in true analysis.[2]

In evaluating the financial statements of lessee companies, banks have similar need to adjust the financial statements presented by the accountant as indicated by the following statement from a bank official:

> Although a lease arrangement eliminates from the balance sheet a liability for borrowed money, there still exists an obligation to make payments in the future. It seems necessary, therefore, to adjust the balance sheet of the seller-lessee so as to reflect the true liability attaching to such leases, because from

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[1] Ibid., pp. 13-14.

[2] Lewis, op. cit., p. 162.

> a statistical and a practical viewpoint there is very little difference between a lease arrangement and a term contract involving borrowed money. In either case the failure to service the obligation results in loss to the debtor of the use of the property involved.[1]

Donald R. Gant, a member of the investment banking firm of Goldman, Sachs and Company, expressed similar views in the article from which we quoted earlier in this chapter. The capitalization technique described in this chapter should overcome the shortcoming in present-day balance sheets described by Lewis, Booker and Gant and thereby eliminate the analysts' need for making adjustments to the financial statements mentally.

The Capitalization Controversy

The proposal to capitalize long-term leases has received mixed reactions from the financial world. Both the case against, as well as the case for, capitalization are considered in the following paragraphs.

The Case Against Capitalization

The capitalization proposal has been met by some rather violent opposition. In a letter to the editor of The Journal of Accountancy, the president of a leasing company made the following statement:

> . . . [Capitalization] seeks a departure which strikes at the very foundation of accounting, a foundation based on the fundamental concept of cost. Once this concept is breached, there are no reaches of the wild blue yonder into which accounting improprieties may not trespass--to the disadvantage of all segments of the public.[2]

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[1]Claude H. Booker, Jr., "The Leasing Arrangement," Robert Morris Associates Bulletin, Vol. XLIII (October, 1960), p. 30.

[2]Alvin Zises, "Recording Leases Obligations," letter to the editor of The Journal of Accountancy, Vol. CXI (June, 1961), p. 28.

Zises supported this position against capitalization by citing the following statements of bankers, insurance executives and financial analysts:

> The thing that disturbs me about that [capitalization] is the bringing into the financial statements of . . . artificial assets or liabilities which cause distortion and make analysis quite difficult.[1]

> . . . the investor and the lender in analyzing a financial statement wants facts not conclusions of the accountant.[2]

> The capitalization of leases logically would dictate the inclusion of the current position [sic] of them in current assets and current liabilities. . . . Would we not compound a serious problem for many corporations which in their loan agreements may have a provision requiring the maintenance of a certain relationship between current assets and current liabilities? The corporation in question may become a technical violator of the loan agreement.[3]

> The inclusion of these amounts in the balance sheet could present considerable difficulties from the viewpoint of uniformity of approach and they may tend to distort the financial picture from the viewpoint of review by many of the relatively less informed lenders and investors.[4]

> I can imagine nothing much more chaotic than for the CPAs to take the position in favor of capitalization and the security analysts, the income account approach and tabulation of commitments.[5]

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[1]A statement by "a senior officer of one of the largest banks in Michigan" as quoted by Alvin Zises. Ibid.

[2]A statement by "the president of one of the largest banks in the South" as quoted by Alvin Zises. Ibid.

[3]A statement by "the first vice president-investments of a large insurance company in New England" as quoted by Alvin Zises. Ibid.

[4]A statement by "the vice president of one of the largest banks in the Southeast" as quoted by Alvin Zises, Ibid., pp. 28-29.

[5]A statement by a "financial analyst" as quoted by Alvin Zises. Ibid., p. 29.

> . . . it is clear, at least in my mind, that leasing and debt are two different things. Anything which is done to make these types of financing appear one and the same is misleading and this applies to accounting treatment, legal treatment, tax, etc.[1]

The position against capitalization was supported by other letters to the editor in which the following comments were made:

> I believe that those who advocate the capitalization of long-term leases are trying to transform the balance sheet into a crystal ball. Even if it were desirable to do so, which it is not, I find it hard to believe that a reasonable formula can be divised to reduce to a common basis of dollars and cents the diverse factors involved in the infinite variety of lease terms and relationships.[2]

> As one long concerned with lease problems from the points of view of leading institutions, lessors and lessees, I have uniformly and steadfastly supported all who stand for full disclosure. I feel, however, all factors considered, that the proper place for such disclosure is in a footnote and not in the balance sheet as such. I fear misleading implications of sale, rather than lease, if the transaction is handled otherwise. No sophisticated analyst will be misled by a properly worded footnote.[3]

These attacks against capitalization may be summarized as follows:

1. Legal differences between the lease and the more conventional forms of debt. These were discussed in greater detail at the end of Chapter III.

2. The inexactness of capitalization techniques, the wide margin of error and the drastic effect these errors would have on financial analysis.

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[1]A statement by "an officer of one of the largest New York City banks," as quoted by Alvin Zises. Ibid.

[2]Donald C. Cook, "Long-Term Leases," letter to the editor of The Journal of Accountancy, Vol. CXI (May, 1961), p. 33.

[3]Lester E. Denonn, "Long-Term Leases," letter to the editor of The Journal of Accountancy, Vol. CXI (May, 1961), p. 34.

3. The hardship that capitalization would work on many firms who are now engaged in leasing (e.g., it would cause many firms technically to violate their loan agreements).

The Case for Capitalization

A major change in accounting procedures, such as has been suggested here, can presumably come about only if it can overcome the wrath of those who are employing the obsolete practice. For this reason, the arguments which have been presented against the proposal must be examined more closely.

Legal Arguments

Much of the case against capitalization is centered around the legal arguments which were presented in Chapter III as the rationale underlying current reporting. The three major legal arguments presented were: first, the lessee does not hold legal title to the leased property; second, other contractual items, such as purchase commitments, are treated in the same manner as are leases; and third, the differences between the lease and the more conventional forms of debt in the event of financial difficulty.

Lessee does not hold legal title.--The fact that the lessee does not hold legal title to the leased property does not mean that the lease transaction should be excluded from the lessee's books. The concept of looking beyond the legal details of a transaction to the broader financial facts has been used in other areas of accounting for decades. For example, when a firm acquires the use of an asset under a conditional sales contract, it does not have legal title to the asset until the debt has been completely paid. Few accountants would hesitate to include this under the assets of the using firm. In fact, anyone who

would suggest otherwise would be charged with presenting incomplete and misleading financial statements.

Similar treatment of other contractual items.--One basic objection to the capitalization of leases which was expressed in the previous section was concerned with the fear that it may open the door to pulling other contractual items onto the balance sheet. It is conceded that capitalization may indeed open the door to other changes in the financial statements. It does not necessarily follow, however, that all other contractual obligations and commitments will eventually find their way onto the balance sheet. It is important to note here the distinction between a financial lease and a service lease as it was discussed in Chapter II. In this connection, it was proposed only that the financial lease be capitalized. Similar reasoning should be applied to other contractual obligations, such as long-term purchase commitments or labor contracts. To the extent that one party has performed his obligation under the contract, the second party has acquired an asset. To the extent that these services have not been paid for, he has incurred a liability. In the case of a financial lease, one party has performed all or essentially all of the service required of him without receiving payment therefor; and for this reason it is held that the other party has acquired an asset and incurred a liability.

So it should be with any other contractual obligation. If one party agrees to deliver merchandise at a fixed price at some future date, and the other party agrees to purchase the merchandise under these same terms, there exists a contract but no liability. As soon as one of the parties performs on the contract (party one delivers the goods or party two makes payment therefor) the other party acquires an asset. To the extent that one party has performed and the other has not, the latter party has incurred a liability.

Differences in the event of financial difficulty.--The opponents of capitalization point to the different treatment which is given leases in the event of financial difficulty, as opposed to the treatment given debt instruments in the same conditions, as a major reason for not recognizing leases on the balance sheet. In this connection, it should be noted that the accounting profession has long recognized the principle of the "going concern." Under this concept, the financial statements are prepared under the assumption that the firm will continue in business for an indefinite period of time. If this assumption is not valid, then it is likely that neither the assets nor the liabilities will be realized at the figure at which they are shown on the balance sheet. The fact that their book value may be more or less than their liquidation value does not cause us to omit these items from the balance sheet entirely. Why then should the fact that in the event of financial difficulty our lease liabilities will not be paid at book value cause us to treat them any differently? From the standpoint of the "going concern," the lease asset and lease liability both belong on the balance sheet.

Should the company encounter serious financial difficulty, the accountant would abandon the conventional statements and prepare a statement of realization and liquidation. In this instance, it would be appropriate to show the lease obligation at the figure at which it is anticipated it will be paid (between one and three years rental) rather than omitting it from the statement entirely and referring to it in a footnote only. The conventional balance sheet, however, would be prepared in accordance with the "going concern" principle; and, accordingly, any arguments based upon differences in the case of bankruptcy would not be valid.

Legal vs. financial accounting.--All of the arguments against capitalization which are based on legal grounds are weakened by the fact that they ignore important financial and economic facts. They fail

to recognize the financial similarities between the lease and the more conventional forms of debt and accordingly use faulty reasoning to justify their position. For example, in the letter cited in Chapter III, Richard Sanzo, senior editor of Dun and Bradstreet, Inc., argued against capitalization on the basis that ". . . a lease obligation would be liquidated in fact out of income and not out of assets." Yet this same author, in pointing out the dangers of excessive debt financing, made the following statement:

> When money is borrowed to put into fixed assets, the borrowings become a kind of mortgage on future earnings or new capital. For only earnings or new capital can repay that kind of debt. Meanwhile, maturing debt instalments may become troublesome [emphasis supplied].[1]

This latter statement makes it clear that conventional debt incurred to finance fixed assets is also typically repaid out of "income and not out of assets."[2] According to Sanzo's reasoning, almost all liabilities of a growing company should be omitted from the balance sheet, since both the company and the creditors look to the earnings rather than to present assets for repayment. Obviously, just the reverse is true. Because both leases and conventional long-term debt "become a kind of mortgage on future earnings," they both belong on the balance sheet.

Inexactness of Capitalization Techniques

The fact that a figure must be estimated is no reason for ignoring it. Accounting is full of estimates, and a carefully made estimate is certainly more valuable than none at all. The accountant, therefore, is justified in placing figures on the balance sheet which represent mere approximations. However, the fact is that the capitalization technique

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[1]Richard Sanzo, Ratio Analysis for Small Business (Washington, D. C.: Small Business Administration, 1960), p. 52.

[2]I am using Sanzo's words here. Actually, it might be more correct to say that both lease obligations and debt obligations are typically met out of assets which are provided from earnings inasmuch as earnings (or income) merely represent asset increases.

suggested earlier in this chapter is actually more exacting than techniques utilized by the accountant in many other areas. The charge of inexactness possibly stems from the fact that the word "capitalization" has been used to refer to at least two very different techniques. The first technique, and the one used here, calls for discounting the future rentals payable under the lease to their present value at the interest rate implied in the lease agreement. This is a very exact process and is no more difficult than amortizing a premium or a discount on bonds over the life of the issue.

The second technique, also described by some writers as capitalization, is much less precise. It involves some very important assumptions and does not make use of the "present value" concept. Donald R. Gant describes this second technique, together with some of its limitations, as follows:

> The more sophisticated approach, which is being adopted to an increasing extent, represents an attempt to recast a company's balance sheet to include the assets and the liabilities which its lease commitments are believed to represent. This involves capitalizing its annual lease rentals at some arbitrary rate--commonly in the range of from 6% to 8%. The annual rental payments are in effect assumed to represent 6% or 8% of the unamortized investment in leased property. For example, a $1 million annual rental commitment, capitalized at a 6% rate (i.e., $1 million divided by 0.06), would be assumed to represent a $16.7 million investment in leased assets, which would be added to the asset side of the balance sheet, and a similar long-term obligation, which would be added to the liability side.
>
> The capitalization rate used obviously has an important bearing on the results which this type of analysis will produce. The selection of a rate, in turn, involves an implicit assumption as to the average remaining term of the company's leases and the interest return to the investor which is incorporated in the rental payment. If this interest factor were 5%, for example, capitalization at 6% would assume an average remaining term of 36 years (this being the length of time required for a loan of $1 bearing interest at 5% to be repaid through annual payments of $0.06 each); an 8% capitalization rate, a 20-year remaining term

(this being the length of time required for the same $1 loan to be repaid through annual payments of $0.08 each).

These commonly used capitalization rates undoubtedly tend to overstate the liability represented by the lease commitments of most companies, since the average remaining term of their leases is probably less than 20 years.[1]

The argument that capitalization is a very inexact process which involves assumptions that may grossly overstate the liability represented by lease commitments is valid when referring to the process described by Gant. However, inasmuch as these estimates are not necessary under the "present value" concept described earlier in the chapter, these arguments are not a valid criticism of the process described as "capitalization" in this study.

Capitalization Would Impose Hardships

It is quite possible that a major change in accounting procedures, such as the proposed capitalization of leases, may work a temporary hardship on some firms which enter into lease contracts prior to the time the change is made effective. However, because of the rapid rate at which leasing is growing, the longer the change is deferred, the greater this hardship will be.

It is also felt that these hardships have been somewhat exaggerated. Banks are not in business to call loans or force bankruptcy at every possible opportunity, but instead to loan money. It seems unlikely that a prudent banker would call a loan merely because a change in the accounting procedures caused a technical violation of a loan agreement.

Development of Capitalization

The capitalization proposal was first made following the second

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[1]Gant, op. cit., p. 139.

world war at the time leasing was beginning to gain wide usage as a financing device. At that time some accountants were advocating extending to leasing the long established concept of looking beyond legal details to financial facts. Writing in The Accounting Review in 1948, Professor John Myers stated:

> The whole theory of consolidated balance sheets is based on looking through legal details to see the broader economic facts. I believe the same idea should be applied in recording the acquisition of a plant with the use of outside funds, i.e., look through the legal details and record the broad economic facts of the case.[1]

Similar views were expressed at about the same time by Arthur M. Cannon in an article in The Journal of Accountancy. In this article Cannon examined the published financial statements of Safeway Stores, Inc., Allied Stores Corporation, Montgomery Ward and Company, and J. C. Penney Company and made the following observations:

> Rapid expansion of so-called "buy-build-sell-lease" programs of major retailers divests their balance-sheets of important fixed assets and long-term fixed obligations. Do statements "fairly present the position" of these companies?
>
> . . . . . .
>
> What both the owner and mortgagee rely upon is the long-term non-cancellable promise to pay of the tenant. But no hint of a credit balance appears in any liability account in the tenant's books. One wonders if credit is the kind of cake you can eat and have, too.
>
> . . . . . .
>
> It is not yet accepted accounting practice to mention in published audit reports the existence of long-term non-cancellable net leases, nor is attention generally directed to the possible contingent liabilities connected therewith. The published audit reports for 1946 on the four companies previously mentioned in greatest detail make no such mention.
>
> . . . . . .
>
> One answer might be to show the leasehold as a fixed asset subject to amortization, and the rent obligation as a fixed liability. . . . In the meantime and pending a more satisfactory device, we

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[1]John H. Myers, "Presentation of Long-Term Lease Liabilities and the Balance Sheet," The Accounting Review, Vol. XXIII (July, 1948), p. 291.

> may fall back on the overworked stratagem of the footnote to set out the facts as to these fixed obligations unrelated to any present balance-sheet fixed asset or funded debt. This would seem to be the minimum duty if our statements are to "fairly present" the real financial condition of audited companies.[1]

To a large degree, the profession has followed Cannon's suggestion and has fallen back on the footnote in an attempt to present fairly the financial position of lessee companies. This practice has continued as accountants have failed to reach agreement on a "more satisfactory device." The advocates of capitalization, however, maintain that a "more satisfactory device" has now been developed and the "meantime" is now over.

This controversy stimulated a series of rather heated magazine articles. One of the most interesting series was presented in the Harvard Business Review and started with an article by Donald Gant which appeared in the March-April 1959 issue.[2] His article provoked many letters to the editor in which Alvin Zises, the president of a leasing company, led the crusade against capitalization. Zises then proceeded to initiate a similar controversy in the February 1961 issue of The Journal of Accountancy.[3] And so the smoke began to rise as the fire spread to many other publications.

In response to the great interest which was aroused by the Gant article, the editors of the Harvard Business Review asked Richard F. Vancil and Robert N. Anthony to explore certain aspects of the controversy. Through direct-mail surveys, they contacted some 512 financial institutions, as well as 1,310 of the largest industrial, merchandising,

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[1]Arthur M. Cannon, "Danger Signals to Accountants in Net Lease Financing," The Journal of Accountancy, Vol. LXXXV (April, 1948), pp. 312-319.

[2]Gant, op. cit.

[3]Alvin Zises, "Disclosure of Long-Term Leases," The Journal of Accountancy, Vol. CXI (February, 1961), pp. 37-47.

utility, and transportation companies in the United States. Their findings were reported in the November-December 1959 issue of the Harvard Business Review and are summarized in the following paragraphs.[1]

In regard to the financial institutions, Vancil and Anthony were interested in determining if these institutions had formal techniques for weighing lease obligations for credit purposes. They summarized their findings as follows:

> (1) A majority of the analysts in each type of institution surveyed state that they use one or both of the formal analytical techniques. The smaller figures from the more detailed second-stage survey suggest that in the first-stage survey many respondents had given us the answer they thought we were looking for rather than the answer applicable to their situation. This difference between the first-stage and second-stage surveys might also be interpreted as meaning that analysts in many institutions think that some formal technique is desirable or appropriate, but only a few institutions have actually established the use of a formal procedure on a routine basis.
>
> (2) Only a very few mutual funds, investment banks, pension and college fund trustees, and rating companies actually use formal analytical techniques in evaluating lease obligations.
>
> (3) A significant number of insurance companies and commercial banks do use such techniques. [Exhibit 17] shows the numbers of users stated as a percentage of the original mailing, with adjustments for the estimated practices of nonrespondents as well as those who answered the second-stage survey in a different manner than they answered the first-stage survey.
>
> (4) Only a few insurance company and bank analysts are using capitalization procedures which result in a reasonably accurate estimate of the equivalent liability represented by a lease obligation.[2]

In the corporate survey, Vancil and Anthony attempted to "observe the incidence and effectiveness of restrictions against leasing in corporate loan agreements."[3] They were led to conclude:

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[1]Richard F. Vancil and Robert N. Anthony, "The Financial Community Looks at Leasing," Harvard Business Review, Vol. XXXVII (November-December, 1959), pp. 113-130.

[2]Ibid., p. 118.

[3]Ibid., p. 121.

EXHIBIT 17

Estimated Extent to Which Formal Procedures are Employed for Recognizing Long-Term Leases[1]

Procedure	Insurance companies			Commercial banks		
	Number using procedure	Per cent of original mailing	Assets as per cent of original mailing	Number using procedure	Per cent of original mailing	Assets as per cent of original mailing
Treat lease payments as fixed charge:						
As indicated by responses to first-stage survey	43	46%	72%	75	51%	58%
As indicated by responses to second-stage survey*	28	30	58	33	22	41
Capitalize lease payments as a liability:						
As indicated by responses to first-stage survey	35	37	73	24	16	28
As indicated by responses to second-stage survey*	25	27	39	17	11	25
On the basis of the method reported being such as to produce results within reasonably accurate limits*	10	11	25	5	3	4

*Figures have been adjusted to include the estimated actions of all nonrespondents based on a telephone survey of 8 nonrespondent banks and 10 nonrespondent insurance companies.

[1]Richard F. Vancil and Robert N. Anthony, "The Financial Community Looks at Leasing," Harvard Business Review, Vol. XXVII (November-December, 1959), p. 121.

> (1) The use of lease financing is relatively common in American industry. Nearly 50% of the industrial corporations surveyed are parties to long-term leases, and this percentage rises to 88% for retail and wholesale merchandising concerns and to 93% for integrated oil companies. The number of companies engaged in long-term leasing appears to increase as the percentage of debt in the capital structure increases.
>
> (2) Less than 50% of the respondents (other than utilities) that have loan agreements restricting or limiting the incurrence of additional long-term debt also have effective restrictions concerning the incurrence of additional long-term lease obligations.
>
> . . . . . .
>
> The most common effective restriction, found in about two thirds of the cases of effective restrictions, is one which limits the total payments under long-term leases to a certain dollar amount each year.
>
> . . . . . .
>
> (3) Restrictions against long-term leasing almost always apply to real estate, but in over 50% of the cases a restriction is also applicable to equipment and other chattels.[1]

The Vancil-Anthony study provides evidence that most analysts recognize the lease as a form of debt. Many of them have accordingly established formal procedures to revise the financial statements as presented by the accountant in order to properly reflect the lease transaction. Others presumably think that such procedures are desirable but for some reason have not established them.[2] This would seem to indicate that from the standpoint of the financial institutions, the statements of lessee corporations as prepared by the accounting profession are not adequate. While most of the analysts recognize this inadequacy, they have apparently not been able to establish procedures which compensate for this deficiency. This is evidenced by the replies to a case situation prepared by Vancil and Anthony in which each respondent ". . . was asked to indicate the amount of the adjustments, if any, he would actually make [to the financial statements] if he were analyzing

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[1] Ibid., pp. 124-125.

[2] Ibid., p. 118.

the company for credit appraisal purposes."[1] Their results were as follows:

> . . . of the 41 respondents, 11 reported an amount of capitalized rent within the reasonable range established, but 14 reported a greater amount, and 16 reported a smaller amount.[2]

This means that only 25 per cent of those attempting to adjust the financial statements were able to arrive at an amount which reasonably approximated the equivalent debt. The authors reported that ". . . some very large institutions are included among those above and below the acceptable limits."[3] These figures seem to indicate a need for the professional accountant to assume the responsibility for seeing that the leases have been properly capitalized--first of all, because the institutional reader has indicated that conventional financial statements are not adequate for his purposes; and second, because the financial analysts have demonstrated that they are unable to come up with a reasonable figure in many instances.

Textbook Treatment

Unfortunately, the capitalization proposal has not been given adequate consideration in accounting and auditing textbooks. Moonitz and Staehling present a very good but limited discussion of the subject in their book, Accounting--An Analysis of Its Problems, and take a position favoring capitalization.[4] However, most textbooks ignore the

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[1]Ibid., p. 117.

[2]Ibid., p. 120. The "reasonable range" was established "by discounting the future lease payments to their present value using as the interest assumptions 6% compounded monthly for the low figure and 5% compounded annually for the high figure--the two most extreme assumptions stated by the 11 respondents who used this technique." (Ibid., p. 119).

[3]Ibid., p. 120.

[4]Maurice Moonitz and Charles C. Staehling, Accounting--An Analysis of Its Problems, Vol. I, (Brooklyn, New York: The Foundation Press, 1952), pp. 312-325.

problem, and many do not even refer to leases or leaseholds in the index. When they do mention them, they usually provide no discussion of capitalization or the problems generated by the financial lease. For example, Holmes, in his Auditing: Principles and Procedure, suggests the following audit program for leaseholds:

1. Examine leasehold authorization.
2. Examine leasehold agreements or contracts.
3. Ascertain that leases are properly valued at amortized cost.
4. Verify cost and amortization if advance payments have been made.
5. Verify the cost and amortization of leasehold improvements.[1]

In elaborating on this program, Holmes states:

> In recent years, there has been a growing practice of using long-term leases as a method of financing. . . . It is the opinion of the author that adequate disclosure should be granted the existence of such long-term leases in the financial statements, in accordance with Accounting Research Bulletin 43, chapter 14.
>
> . . . . . .
>
> Leases should not appear as assets unless (1) a flat amount has been paid in advance to cover the leasehold or (2) the original lessee has capitalized his expected savings or profit derived or to be derived under a sublease; this is not customary.[2]

Bell and Johns in their book Auditing recognize the problem but fail to deal with it when they state:

> The growth of such practices [sale and leaseback] has created problems of disclosure in financial statements. When the rental or other obligations under long-term leases are material, good practice requires disclosure be made by way of footnotes to the financial statements or otherwise as to the aggregate amount of the required annual rentals and other pertinent facts.[3]

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[1]Arthur W. Holmes, Auditing: Principles and Procedure (5th ed.; Homewood, Illinois: Richard D. Irwin, Inc., 1959), p. 559.

[2]Ibid., pp. 559-560.

[3]William H. Bell and Ralph S. Johns, Auditing (New York: Prentice-Hall, Inc., 1952), p. 272.

CHAPTER V

METHODOLOGY

Selection of Companies

In order to evaluate the impact of capitalization on financial ratios, it was first necessary to select some actual cases for analysis. The initial task was to locate some companies that used the lease as a financing device. A logical starting point seemed to be those corporations which made some reference to leases in their financial statements, as reported in Accounting Trends and Techniques. Of the 216 companies which reported leases in one form or another, only 38 were identified in the thirteenth edition of this publication. These 38 were cited as examples of companies which reported various provisions of their lease agreements, such as annual rental, aggregate rental, lease expiration date, number of leases, renewal option, sale-and-lease-back feature, and term of lease. Six more lessee companies were added to the list from various sources. The list of 44 lessee corporations used in the study is included as Appendix I.

Having located some lessee corporations, the next step was to obtain information concerning their leases. In this connection, a request for a copy of the firm's most recent annual report was addressed to the controller or chief financial officer of each lessee corporation. Replies were received from all but two of the firms. Each annual report was then examined to determine the extent and nature of the disclosure of the long-term lease agreements. As indicated in Chapter III, most of the companies confined their reporting on this subject to very brief footnote remarks which were typically not sufficient for the purpose of this study.

The next step was to search the files of the Securities and Exchange Commission to see if additional lease details were reported on the forms 10K filed with that agency. An examination was made of the forms 10K of 24 companies.[1] In most instances, the forms 10K contained essentially the same information as that disclosed in the published annual report. Two companies, F. W. Woolworth and Allied Stores, provided substantially more detail. For example, F. W. Woolworth made the following comment in their annual report:

> Minimum annual rentals for leased property, excluding rentals based on a percentage of sales and excluding payments of real estate taxes or other expenses, total approximately $44,300,000, the major portion of which relates to leases expiring subsequent to 1965.[2]

In the form 10K, the company provided the following information:

> The aggregate of minimum annual rentals payable in subsequent years, excluding rentals based on a percentage of sales and excluding payments of real estate taxes, insurance and other expenses, was $44,269,932 under 2,639 leases in effect at December 31, 1960. The minimum annual rentals under such leases and periods of expiration are as follows:

Lease Expiring:	Annual Rentals
1959-1963	$ 5,393,752
1964-1968	3,418,472
1969-1978	15,364,998
1979-1988	6,124,396
1989-1998	4,775,933
Subsequent to 1998	1,353,081
	$36,430,632

> In addition, there are in effect 72 leases, with rentals based on a percentage of sales, without a minimum annual rental.[3]

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[1]The forms 10K for the remaining companies were not available in the Chicago Office either because they were unlisted companies and were not required to report to the Securities and Exchange Commission or else were listed on the Mid-West Stock Exchange. The Chicago office of the Securities and Exchange Commission reported that the forms 10K for this latter group had been transferred to the office of the Mid-West Stock Exchange.

[2]F. W. Woolworth Company, Annual Report, December 31, 1960.

[3]F. W. Woolworth Company, Form 10K, in the files of the Chicago Regional Office, United States Securities and Exchange Commission.

Even the above information is not detailed enough to enable the reader to capitalize the leases accurately. This lack of sufficient detail placed at least two important limitations on the study. To begin with, it made it impractical to select scientifically a sample because so few firms disclosed sufficient detail to permit even a reasonable estimate to be made of the capitalized value of their leases. For this reason, it was concluded that this thesis must be confined to a pilot study of some actual lease cases. Any attempt to estimate the over-all impact of capitalization of leases based upon sampling techniques must, of necessity, be deferred until reporting becomes more extensive.

The second limitation was imposed by the fact that none of the companies provided all of the details required for precise computations.[1] This reduced the possible scope of the study by introducing certain assumptions and estimates into the calculations. For example, in only one instance was the exact lease expiration date shown.[2] In all other cases, the reader was told only that a large number of leases were to expire "sometime" within a specified period of time (usually five to ten years). Likewise, the annual rentals payable under each individual lease were often buried in aggregate figures. Even more significant, however, was the omission of the interest rate implicit in each of the lease agreements. None of the companies gave any indication of this implied interest rate in either its annual report or in its form 10K.

Because of this insufficient data, only eleven of the forty-four companies studied were selected for capitalization. Six of the companies disclosed enough information in their annual reports to enable the reader

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[1]Textron, Inc., did show the discounted amount of rentals payable under leases in a footnote to the financial statements but did not provide any details as to how this amount was arrived at.

[2]Purolator Products, Inc.

to arrive at a reasonable estimate of the equivalent amount of debt represented by the lease obligations. The information for the other five was obtained from the examination of the forms 10K.

Determination of Rental Schedules

Inasmuch as rental payment dates were not specified, it was next necessary to make some assumptions in this regard. To begin with, it was assumed that all lease rentals were payable annually as of the last day of the lessee's fiscal year. In those cases where lease expiration dates were not specified but where a number of leases were designated as expiring within a certain period of time, all leases in that group were assumed to expire exactly mid-way through the period. In the case of a ten-year period, for example, it was assumed that the leases expired at the end of the fifth year. Where a five-year period was used, the leases were assumed to expire mid-way through the third fiscal year. In those instances where this assumption resulted in a lease expiring half-way through a year, the total rent payable during that year was calculated as one-half the amount payable during the preceding year, plus one-half the amount payable during the subsequent year.

Where the time period specified had an open end (for example, "1976 and thereafter") it was assumed that all leases in this period expired as of the end of the first year in the open-end period. This treatment was justified on two grounds. First of all, such an assumption was conservative, and it appeared more desirable to understate the discounted value of the leases rather than run the risk of overstatement. Second, it was felt that in recognizing the time value of money, the rentals payable during this open-end would be insignificant in relation to the discounted value of the rentals of the earlier periods.

The rentals payable during the periods of renewal or the fair market value of the property at the end of the initial period (whichever was applicable in the circumstances) should also have been discounted to their present value. However, the details necessary for making these calculations were not available and so these amounts were ignored. Once again, the time value of money would make these amounts appear relatively insignificant.

The techniques used to estimate the amount of rentals payable each year may be seen by referring to the case of Peoples Drug Store.[1] The form 10K filed with the Securities and Exchange Commission for the year ended December 31, 1960, disclosed the following information:

Years Expiration	Number of Leases	Aggregate Minimum Annual Rental
1961 to 1965 inclusive	63	$ 555,314
1966 to 1970 inclusive	45	397,880
1971 to 1975 inclusive	30	394,756
1976 and thereafter	56	1,133,250
	194	$2,481,200

Using the technique described previously, it was assumed that the 63 leases in the first period were scheduled to expire June 30, 1963; the 45 in the second period were scheduled to expire June 30, 1968; the 30 in the third period were scheduled to expire June 30, 1973; and the 56 in the final period were scheduled to expire December 31, 1976. Based upon these assumptions, the following schedule of rent payments was drawn up:

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[1]Schedules of Lease Rentals for the eleven companies used in the study are included as Appendix II.

Date (December 31)	Amount of Rent
1961	$2,481,200
1962	2,481,200
1963	2,203,543[1]
1964	1,925,886
1965	1,925,886
1966	1,925,886
1967	1,925,886
1968	1,726,946[2]
1969	1,528,006
1970	1,528,006
1971	1,528,006
1972	1,528,006
1973	1,330,628[3]
1974	1,133,250
1975	1,133,250
1976	1,133,250

Selection of Interest Rates

Having estimated the annual rentals for each firm, it was next necessary to arrive at an appropriate rate of interest in order to compute the present value of the future rentals. Because there were in excess of 5,750 leases involving eleven different companies and negotiated over a period of ten or twenty years, no one interest rate could possibly apply to these varied circumstances. On the other hand, because none of the eleven companies specified the interest rate implicit in its lease agreements nor provided sufficient detail to compute these implied rates, it was impractical to attempt to estimate the individual rates for each of these 5,750 leases. For this reason, it was necessary to arrive at one rate which could be used in capitalizing the leases included in this study.

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[1]One-half 1962 rent ($1,240,600) plus one-half 1964 rent ($962,943).

[2]One-half 1967 rent ($962,943) plus one-half 1965 rent ($764,003).

[3]One-half 1972 rent ($764,003) plus one-half 1974 rent ($566,625).

The interest rate selected for the calculations was six per cent compounded annually. The selection was based on a number of considerations. To begin with, reference was made to the coupon rate at which the eleven companies were borrowing long-term funds. Two of the firms did not indicate the rate of interest available for borrowing, but the other nine indicated rates which varied from three to six per cent. The rate selected for capitalization, then, approximated the highest rate of interest paid by any of the firms for borrowed funds.

The six per cent rate was no doubt higher than the average rate for borrowed funds. However, this was justified on two grounds. First of all, it is rather uniformly agreed that the rate of interest is typically higher under a long-term lease than it would be under borrowing by the same firm. In regard to the interest rates charged by his firm, the vice-president of a large mortgage banking firm wrote:

> The typical interest rate under a leaseback for a company of modest means, which in our terminology would mean between $1,000,000 and $4,000,000 net worth, would carry a rate of at least 6% plus amortization over the primary lease term.
>
> It is exceedingly difficult to say that any rate is typical due to the credit standings of different companies. While one company of $4,000,000 net worth might be up to their ears in long-term debt and require a rate of $6\frac{1}{2}$% plus amortization, another of equal worth might be entirely free of long-term debt with tremendous earning capacity and require a rate of 5-3/4% plus amortization.
>
> The rates on all purchase-leasebacks are higher than either first mortgage loans or private placements, due to two factors: The first is the tax situation of the various insurance company investors, and the second the added risk of 100% equity in a parcel of property.
>
> During this current year we have made leasebacks as low as 5% plus amortization with the highest being 7% plus amortization. In the first instance, the company had a net worth in excess of $75 million, and in the last, the company was a trucking concern, with a net worth of approximately $3.5 million.

> To be specific, we would say that the rates on purchase-leasebacks would average from one-quarter to three-quarters of a per cent higher than the rate demanded on either a first mortgage loan or a private placement loan. Here again, we have to insert that credit would be a determining factor. The market, as we previously stated, for purchase-leasebacks among insurance company investors has narrowed considerably during the past 18 months. In their place we have been negotiating purchase-leaseback arrangements with Pension Funds, State Retirement Funds, Fraternal organizations, Union Funds, all of whom are more interested in this type of financing due to the fact that they are tax exempt.[1]

Other authorities cite figures which are comparable. Donald R. Gant states "this differential [between leasing and borrowing] is usually in the range of $\frac{1}{2}$ of 1% to 1%, but may often be greater."[2] Referring to the interest rate to be charged on automobile and equipment leases, Keith G. Cone, Vice President of the La Salle National Bank of Chicago, states ". . . the rock bottom rate should be 6% simple interest with a standard rate of $6\frac{1}{2}$ - 7% without making anyone overly rich on financing."[3] Frederick R. H. Witherby, Associate Counsel, New England Mutual Life Insurance Company of Boston, states "as a general rule, a premium of $\frac{1}{4}$ to 1% over the rate for direct, long-term obligations of prime credits . . . is commanded by an investment in a leasing company."[4] These statements seem to support the position that interest rates under leasing are typically higher than those charged on borrowing by the same firm.

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[1]Letter from J. V. Paffhausen, Vice-President, A. H. Gruetzmacher & Co., Mortgage Bankers, 39 S. La Salle Street, Chicago 3, Illinois, November 27, 1961.

[2]Gant, op. cit., p. 126.

[3]Keith G. Cone, "Is Leasing the Answer?" A talk given before the Installment Credit Section, Texas Bankers Association, Hotel Texas, Fort Worth, Texas, September 15, 1958.

[4]Frederick R. H. Witherby, "Personal Property Lease Financing--The Lender's Point of View," Paper read before The Association of Life Insurance Counsel at The Greenbrier, White Sulphur Springs, West Virginia, May 8, 1961, p. 561.

The second justification for the six per cent rate is the fact that it results in a more conservative estimate of the total liability under the lease. The higher the rate of capitalization used, the lower the present value of future rentals. This means that while the six per cent figure may be attacked by advocates of leasing as being too high in relation to the rate charged on borrowing by these same firms, the rate will nevertheless result in a conservative estimate of the total lease liability.

The impact which a rate selection error would have on the capitalized value of a lease may be estimated by referring to Exhibits 18 and 19. Exhibit 18 shows the present value of $10,000 annual rental payable at the end of the year for various periods of time and at various rates of interest. This table indicates that the longer the period of time and the greater the spread between the true interest rate and the estimated interest rate, the greater will be the error. Note, for example, that under a five-year lease, the error would be relatively small ($1,171) if the true rate of interest were six per cent but a five per cent rate were used in capitalization. The error would be much larger ($16,077 as opposed to $1,171) under a thirty-year lease. Note, also, that the higher the rate of interest, the lower the capitalized value.

Exhibit 19 shows the percentage error under various periods of time and various interest rates. It assumes that the true interest rate is six per cent and indicates the percentage by which the capitalized value would be over- or understated if some other rates were used. For example, under a five-year lease, the error would be +2.8 per cent if a five per cent interest rate were used and a -2.7 per cent if a seven per cent rate were used. The error would be greatly amplified under a thirty-year lease where the errors would be +11.7 per cent and -9.8 per cent, respectively.

EXHIBIT 18

Present Value of a Lease Calling for $10,000 Annual Rental for Periods and Interest Rates Indicated*

Length of Lease	Rate of Interest 4%	5%	6%	7%	8%
5 years	$ 44,518	$ 43,295	$ 42,124	$ 41,002	$ 39,927
10 years	81,109	77,217	73,601	70,236	67,101
15 years	111,184	103,797	97,122	91,079	85,595
20 years	135,903	124,622	114,699	105,940	98,181
25 years	156,221	140,939	127,834	116,536	106,748
30 years	172,920	153,725	137,648	124,090	112,578

*Annual rentals are assumed to be payable at the end of each year.

EXHIBIT 19

Percentage Error Incurred by Selection of Improper Interest Rate*

Length of Lease	Rate of Interest** 4%	5%	6%	7%	8%
5 years	+5.7	+2.8	0	-2.7	-5.2
10 years	+10.2	+4.9	0	-4.6	-8.8
15 years	+14.5	+6.9	0	-6.2	-11.9
20 years	+18.5	+8.7	0	-7.6	-14.4
25 years	+22.2	+10.3	0	-8.8	-16.5
30 years	+25.6	+11.7	0	-9.8	-18.2

*Assume a lease with $10,000 annual rental payable at the end of each year for the number of years indicated.

**The true rate of interest has been assumed to be 6%. The table indicates the degree of error which would be incurred if some rate other than the true rate were used to capitalize the lease.

Capitalization of Leases

Working under the assumptions previously outlined, the financial leases of the eleven companies were capitalized. The present value of the rentals payable during the initial non-cancellable term of the leases was considered a "fixed asset" and included in the revised balance sheets under the caption "rights to use of leased property, at discounted amount of related long-term rental obligations." The lease rentals payable within one year were considered "current liabilities" and were shown in the balance sheets as "current lease rentals."[1] The present value of lease rentals payable during the initial non-cancellable term, less the rentals payable within one year, were treated as "long-term liabilities" under the heading "rental obligations under long-term leases (discounted at implicit interest rates)."

The only revision made to the income statements was a shift from "operating expenses" to "interest charges" of the interest implied by the lease agreements. This was computed by multiplying the present value of the leases by the implied interest rate (six per cent).

The schedules of capitalized leases of the eleven firms are included as Appendix II. From these schedules the balance sheets (and selected income statement items) were reconstructed to reflect the capitalized leases. These reconstructed statements are compared with the published ones in Appendix III. The impact of this capitalization upon financial ratios will be analyzed in the following chapter.

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[1]Since the lease rental contains both principal and interest elements, it would probably be more correct to include as a current liability only the amount applicable to principal plus the amount of accrued interest at the balance sheet date. Inasmuch as the dates that rentals were due were not known for the leases in this study, it was not deemed feasible to separate the current rental into principal and interest elements and therefore the entire current rental was considered as a current liability.

CHAPTER VI

THE IMPACT OF CAPITALIZATION ON FINANCIAL RATIOS

Financial analysis is an art requiring expert judgment and skill on the part of the analyst. Unfortunately there exists no mythical crystal ball into which the analyst can gaze and clearly watch the future unfold before his eyes. But in spite of this apparent handicap, financial analysis need not be a "fly by the seat of your pants" proposition. There are certain tools to which the experienced analyst can wisely turn. Among these are a number of financial ratios or proportions which, if properly computed and utilized, can be most helpful.[1] Ratios enable the analyst to center his attention upon important financial statement relationships.

Financial ratios are normally computed directly from the company's certified financial statements without any adjustments being made by the analyst. In the previous chapters it was suggested that certain leases be capitalized and that the resulting amounts be included in the company's financial statements. This proposal would, of course, affect the amounts from which the ratios are computed and in turn, the ratios themselves. The purpose of this chapter is to determine the impact that capitalization would have on conventional financial ratios.

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[1]The word "ratio" is used here in a rather broad context to refer to the relationship between two financial statement figures regardless of the form in which that relationship is expressed. For example, some "ratios" are expressed as percentages rather than in the mathematical ratio form. The form which is most commonly used in financial circles will be used throughout this chapter.

Limitations of Ratios

A word of caution about ratios in general seems in order at this point. Ratios must be used for what they are--financial tools. Too often they are looked upon as ends in themselves, rather than as the means to the end. No ratio may be regarded as good or bad per se. It may be an indication that a firm is weak or strong, but it must never be taken as proof of either one. Ratios may be likened to railroad signals. They tell the analyst to stop, look and listen.

Because of the limitations of financial ratios and the uncertainties surrounding the general business climate, some analysts refuse to use ratios and instead rely solely on their own intuition. Like the rheumatism weather forecasters, these analysts disregard the available signs and gauge a company's financial position solely by a "feelin' in their bones." The following statement relegates this "hunch" method to its proper place.

> A man may say, if he like, that the moon is made of green cheese: that is an hypothesis. But another man who has devoted a great deal of time and attention to the subject, and availed himself of the most powerful telescopes and the results of the observations of others, declares that in his opinion it is probably composed of materials very similar to those of which our own earth is made up: and that is also only an hypothesis. But I need not tell you that there is an enormous difference in the value of the two hypotheses. That one which is based on sound scientific knowledge is sure to have a corresponding value; and that which is a mere hasty random guess is likely to have little value. Every great step in our progress in discovering causes has been made in exactly the same way as that which I have detailed to you. . . . It is in these matters as in the commonest affairs of practical life: the guess of the fool will be folly, while the guess of the wise man will contain wisdom. In all cases, you see that the value of the result depends on the patience and faithfulness with which the investigator applies to his hypothesis every possible kind of verification. . . . [1]

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[1]Thomas Henry Huxley as quoted by Roger E. Ballard and Allan A. Gilbert, "How to Quantify Decision-Making," Business Horizons, Vol. I (Winter, 1958), p. 79.

So it is also with the task of financial analysis. The analyst is still working only with hypotheses to which he must apply every available test. While ratios may never transform an hypothesis to a fact, they may well distinguish the "fool" from the "wise man." Granted that ratios have certain weaknesses but if the limitations are properly discounted, ratio analysis can be a most useful tool. There will likely never be a substitute for skilled judgment in the field of financial analysis. Nevertheless, the successful analyst will continue to utilize every available tool in exercising his judgment.

Selection of Ratios

The number of financial ratios possible is almost limitless. The only ones which are applicable to this study, however, are those which would be affected by capitalization. In Chapter V, it was noted the "fixed assets," "current liabilities," "long-term liabilities," and "interest charges" were all increased, while "operating expenses" were decreased by capitalizing long-term leases. All ratios which utilize any of these items will consequently be affected. Some of the ratios affected by capitalization are:

Current assets to current debt (current ratio)*†
Net profits on net working capital*
Net sales to net working capital (working capital turnover)*†
Fixed assets to tangible net worth*†
Current debt to tangible net worth*†
Total debt to tangible net worth (debt to equity ratio)*†
Inventory to net working capital*
Current debt to inventory*
Funded debts to net working capital*
Funded debt to net plant
Debt to total capital

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*This ratio is included in 14 Important Ratios in 72 Lines of Business (New York: Dun and Bradstreet, Inc., 1961).

†This ratio is included in the list of nine ratios suggested as key ones for small business purposes by Richard Sanzo, Ratio Analysis for Small Business (Washington, D.C.: Small Business Administration, 1960).

Net working capital to net plant
Return on total capital
Times interest charges earned
Net plant to sales (plant turnover)

In order to determine the impact of capitalization upon financial ratios, it is necessary to look beyond the ratios themselves and find out just what each ratio is trying to measure.

> If we consider the many different items on a balance sheet and income statement, there are literally hundreds of possible permutations and combinations of these figures. Rather than engage in an encyclopedic tabulation of these ratios, it is better to have in mind a concept of what we are trying to learn about the firm's position, and then use or devise the appropriate comparison.[1]

Once we know "what it is we are trying to learn about a firm's position," we will be able to judge whether the ratios which reflect the capitalization of leases are more or less effective than those that do not.

Examination of the foregoing list soon makes it apparent that these ratios vary greatly in usefulness. In fact, some of them seem to present meaningless relationships. Furthermore, not all of them will be equally influenced by capitalization of leases. Because of this, the list of ratios has been divided into major and minor components.

Major Ratios

The major ratios which would be affected by capitalization are as follows: debt to equity, debt to total capital, times interest charges earned, return on total capital, the current ratio, fixed assets to tangible net worth, and funded debt to net plant.

Debt to Equity

One of the most important areas of financial analysis concerns itself with the relative proportions of debt and equity in a firm's capital

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[1]Robert W. Johnson, Financial Management (Boston: Allyn and Bacon, Inc., 1959), p. 54.

structure. This relationship can be seen most clearly by computing a ratio of debt to equity or a ratio of debt to total capital. The former ratio is computed by dividing the total liabilities by the total stockholders' equity. The latter ratio is computed by dividing the total liabilities by the total assets.[1] Both of these ratios attempt to measure the relative proportion of total assets that have been supplied respectively by the owners and the creditors.

The assumption normally made in making either of these analyses is that a certain amount of debt is desirable. This assumption is based on the financial principle of "trading on the equity" or "financial leverage," which was mentioned previously. "Financial leverage" simply means that profits or losses are amplified by the existence of debt in a firm's capital structure. This principle is illustrated in Exhibit 20. Company L has a debt to equity ratio of fifty per cent and therefore employs "financial leverage." Company U, on the other hand, has a debt to equity ratio of zero. Notice that the common stock of the levered company (Company L) makes a greater return during years when profits before interest and after taxes exceed $10,000. However, in years when profits are less than this breakeven point the common stockholders earnings are reduced by unfavorable leverage.

As with other financial ratios, it is neither possible nor desirable to establish a workable rule of thumb from which one can determine the acceptable debt ceiling.[2] This is a matter that must be determined

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[1] "Total capital" as it is used in the ratio of debt to total capital refers to the sum of the liabilities plus the stockholders' equity and is therefore equal to the total assets.

[2] Some writers have suggested an empirical rule-of-thumb maximum. For example, Guthmann states: "For public utilities, the maximum percentage for funded debt in the capital structure may be set at 60 per cent; and for railroads, because of the lower earning power of their property investment, at 50 per cent.

. . . . . .

Although individual manufacturing and merchandising concerns have

by the careful and considered judgment on the part of the analyst and will vary widely from firm to firm and from industry to industry. However, the primary basis for this determination is the level and the stability of corporate earnings. The higher and more stable the earnings, the higher the ratio of debt to equity that is permissible.

Times Interest Charges Earned

Another important ratio which is closely related to the debt to equity ratio is the times interest charges earned. The objective of this ratio is to measure the extent of "cushion" available to the funded debt in case future earnings do not meet expectations. A firm with a long history of relatively high and stable earnings could tolerate a lower ratio of times interest charges earned than could a company with highly volatile earnings. Thus, the number of times that interest charges must be earned varies directly with the instability of the firm's earnings.

The times interest charges earned is computed by dividing the income (after deducting all operating expenses and taxes) by the bond interest charges. For example, if the income after the deduction of all operating expenses and taxes is $40,000 and the interest on the bonds is $10,000, the interest charges have been earned four times.

The situation is slightly more complex when there is more than one issue of bonds, because a separate computation must be made for each issue. Where such is the case, the total income before interest and after taxes is divided by the sum of the interest charges on the particular issue, plus the interest charges on all prior issues. Such a

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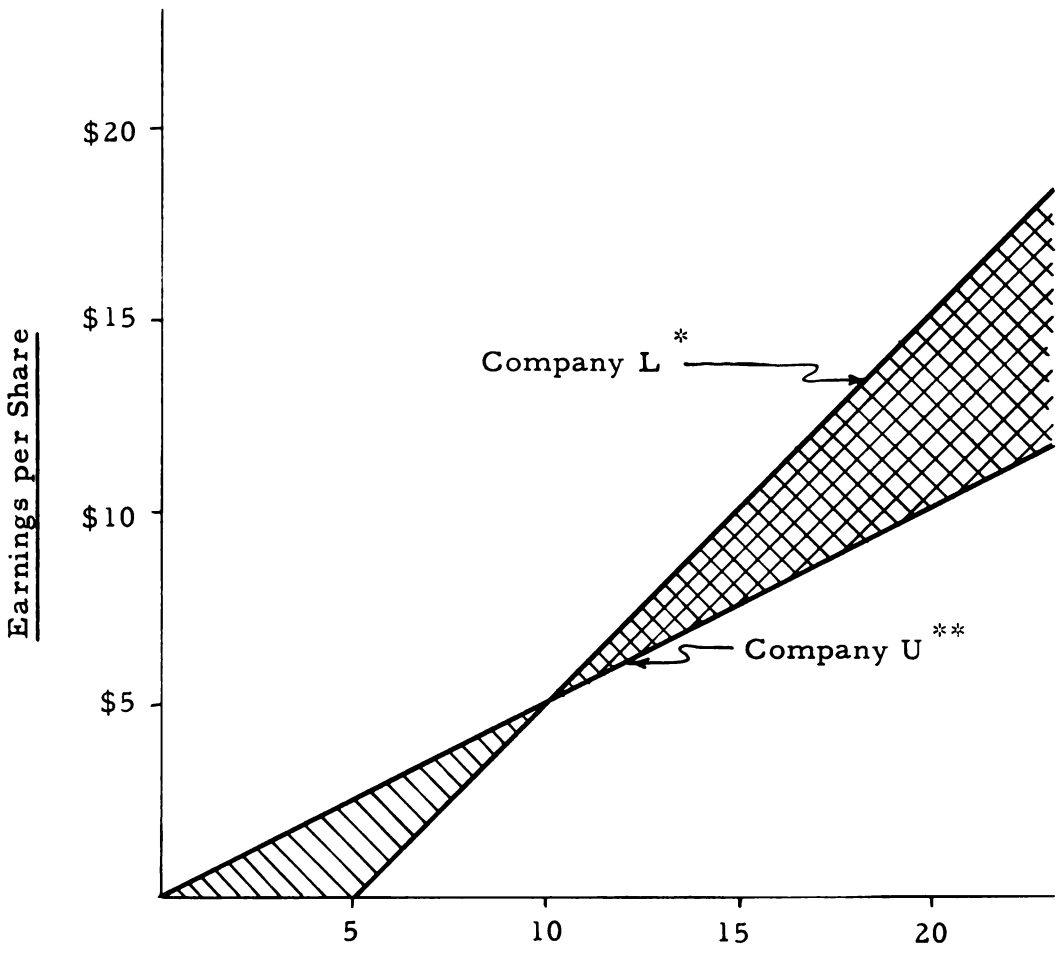
shown as much or even more stability than the public service corporations, the general opinion has been that bonds should occupy a smaller place in their capital structure. A maximum limit of one third would probably obtain for industrials, subject to a possible further limitation in the light of the earnings record, the character of the business, and the extent to which short-term credit is used."[1]

[1]Harry G. Guthmann, Analysis of Financial Statements (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1953), p. 158.

EXHIBIT 20

Illustration of Financial Leverage



*Company L: 1,000 shares $100 par value common stock. $100,000 5% mortgage bonds.

**Company U: 2,000 shares $100 par value common stock. No debt.

Gain from favorable leverage.

Loss from unfavorable leverage.

calculation will reflect the fact that the fortune of a junior issue is linked closely to that of the senior issues. For example, assume an issue of $1,000,000 of four per cent First Mortgage Bonds and an issue of $500,000 of five per cent General Debentures. If the company had earnings after deducting all operating expenses and taxes of $200,000, then the times interest charges earned on the senior issue would be 5 times ($200,000 ÷ $40,000) and on the junior issue would be 2.11 times ($200,000 ÷ [$40,000 + $25,000]).

Return on Total Capital

The return on total capital (return on total investment) is studied as a measure of a firm's general earning power. It measures the return from utilizing a bundle of assets without giving consideration to how these assets were financed, i.e., by debt or equity funds. The return on total capital is computed by dividing the net operating income (income after taxes but before interest or dividends) by the total capital (liabilities plus stockholders' equity). The ratio attempts to isolate the return from operations from that which has come about from "trading on the equity." It is a measure of how effectively management has employed the resources which have been intrusted to it from whatever source.

Some writers have questioned the advisability of including liabilities, such as accounts payable and accrued liabilities, in the above calculations.[1] The reason for their concern is the fact that these sources of capital do not represent explicit rights to share in earnings. Regardless of the claims these creditors may or may not hold, however, the liabilities nevertheless represent an important source of assets which management must effectively employ and should be included in the firm's total capital in computing the above ratio.

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[1]William A. Paton and William A. Paton, Jr., Corporation Accounts and Statements (New York: The Macmillan Company, 1955), pp. 492-497.

The Current Ratio

Probably the most widely known financial ratio is the current ratio. Its purpose is to measure the firm's general debt-paying ability within the near future, generally one year from date of computation. The current ratio is calculated by dividing the current assets by the current liabilities. For example, if a firm has current assets of $3 million and current liabilities of $1 million, its current ratio is three to one or three times. If the ratio is less than one to one then the firm is thought to be verging on insolvency. To the extent that the ratio exceeds one to one, there exists some "cushion" of current assets over current liabilities.

Almost as well-known as the ratio itself is the often suggested rule-of-thumb standard of two-to-one. As mentioned previously, such rules-of-thumb are to be discouraged, since financial analysis is an individual matter; and a ratio which is perfectly acceptable in the case of one company may be totally inadequate for another.

Because it has been so widely used, and because of the stereotype imposed by the application of rule-of-thumb standards, the current ratio has been the subject of much abuse. To begin with, it has been implied that the higher the ratio, the sounder the company. Actually, this is far from the truth. A ratio may be too high just as well as too low. A management which accumulates excess cash and cash equivalent will soon build up a high current ratio. This may well be a sign of stagnation rather than of an astute management. One might well take a look at the classic case of Montgomery Ward during the post second world war era. In this instance, the high current ratio was probably not a sign of an alert and progressive management.

Another possible misuse of the current ratio is found in the failure of the analyst to go beyond the ratio to the items that go to make it up.

This is really not a weakness of the ratio itself, but of the analyst, and is an example of the practice of confusing the means for the end which was described previously. An increased current ratio may well be a sign of a business "slowdown" as excess inventory is accumulated and the collection of accounts receivable "slows" up. Again, the analyst must be reminded to stop, look and listen, and then proceed with extreme care.

The Cash Budget

It has been suggested that a firm's current debt paying ability could be estimated more accurately with a cash budget, rather than with the current ratio. The cash budget is a statement in which the analyst lists the expected cash receipts and expenditures over a specified period of time. In addition to measuring the firm's debt paying ability, the cash budget provides a system for cash management whereby excess funds can be profitably invested and shortages properly planned for. Exhibit 21 is an example of a cash budget.

A major weakness of the cash budget stems from its failure to reflect fully the timing of cash flows. To be effective, it is usually necessary that the cash budget be prepared on a monthly basis. Even though the monthly cash budgets may indicate that the cash balance at the end of each month will be maintained at a safe level, this does not mean that the company will remain solvent during the month. A "cash crisis" may arise as expenditures pile up at the beginning of the month, while cash collections come in rather uniformly throughout the month. In such a case the monthly cash budget would not be effective. In some instances a weekly or even semi-weekly budgets may be necessary to fully reflect the timing of flows. Such a practice would be very time consuming, and because of the many estimates involved would probably not be accurate.

EXHIBIT 21

Cash Budget

	Work Sheet					
	Jan.	Feb.	March	April	May	June
Receipts						
1. Sales	5,000	8,000	18,000	20,000	28,000	26,000
Collections on accounts receivable	4,800[a]	5,000	8,000	18,000	20,000	28,000
Payments						
1. Purchases	6,400	8,000	8,800	8,800	8,800	8,000
Payments on accounts payable	5,880[b]	6,272	7,840	8,624	8,624	8,624
2. Wages	1,600	1,600	2,000	2,200	2,200	2,200
3. Direct factory	1,700	1,700	1,700	1,800	1,800	1,800
4. Admin. expenses	700	700	700	800	800	800
5. Selling expenses	900	900	1,300	1,400	1,400	1,400
6. Purchase of equip.			1,000			
Payment for equip.				1,000		
Operating transactions						
Receipts:						
Collections	$4,800	$5,000	$ 8,000	$18,000	$20,000	$28,000
Payments:						
Payments on accounts payable	5,880	6,272	7,840	8,624	8,624	8,624
Wages	1,600	1,600	2,000	2,200	2,200	2,200
Direct factory	1,700	1,700	1,700	1,800	1,800	1,800
Admin. expenses	700	700	700	800	800	800
Selling expenses	900	900	1,300	1,400	1,400	1,400
Payment for equip.				1,000		
	10,780	11,172	13,540	15,824	14,824	14,824
Net monthly cash gain loss	(5,980)	(6,172)	(5,540)	2,176	5,176	13,176
Cash balance, E.O.M. 12/31 $7,400	$1,420	($4,752)	($10,292)	($8,116)	($2,940)	$10,236
Financial transactions						
Cash balance, B.O.M.[c]	$7,400	$1,420	$1,248	$2,708	$7,884	$11,060
Borrowings (repayments), B.O.M.	0	6,000	7,000	3,000	(2,000)	(8,000)
Total	7,400	7,420	8,248	5,708	5,884	3,060
Net monthly cash gain (loss)	(5,980)	(6,172)	(5,540)	2,176	5,176	13,176
Cash balance, E.O.M.[d]	$1,420	$1,248	$2,708	$7,884	$11,060	$16,236
Cumulative borrowings, B.O.M.	0	$6,000	$13,000	$16,000	$14,000	$6,000

[a]Accounts receivable, December 31; [b]Accounts payable, December 31, less 2% cash discount; [c]Beginning of month; [d]End of month.

Source: Robert W. Johnson, Financial Management (Revised ed.; Boston: Allyn and Bacon, Inc., 1962), pp. 97-98. Reprinted by permission of the publisher.

The current ratio also ignores the time element in cash flows. It reflects only the assets which are cash or will be converted to cash within the normal operating cycle and liabilities which will require cash for payment during the same period of time. It in no way indicates when (during the period) the assets will become cash nor when the liabilities must be paid. The major advantages of the current ratio over the cash budget are the simplicity of calculation and the fact that the required information is readily available to the analyst. It provides only a fraction of the detail of a cash budget, but requires only a fraction of the time. In most instances, the current ratio should serve as a crude estimate of a firm's debt paying ability.

Fixed Assets to Tangible Net Worth

The ratio of fixed assets to tangible net worth is computed by dividing the fixed assets (net of depreciation and amortization) by the stockholders' equity. The purpose of the ratio is to determine the extent to which the firm has tied its investment up in fixed assets thereby limiting the funds available to meet working capital requirements. Dun and Bradstreet has suggested the following rule-of-thumb as a guide:

> The relationship between Fixed Assets and Tangible Net Worth should not exceed 100 per cent for a manufacturer, and 75 per cent for a wholesaler or a retailer. Beyond these limits, so disproportionate an amount of capital is frozen into machinery or "bricks and mortar" that the necessary margin of operating funds for carrying receivables, inventories and day-to-day cash outlays, as well as maturing obligations becomes too narrow. This not only exposes the business to the hazards of unexpected developments, such as a sudden change in the business climate, but creates possible drains on income in the form of heavy carrying and maintenance charges should a serious portion of Fixed Assets lie idle for any length of time.[1]

Funded Debt to Net Plant

The ratio of funded debt to net plant is computed by dividing the

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[1]Dun and Bradstreet, Inc., op. cit., p. 7.

funded debt (long-term liabilities) by the fixed assets (net of depreciation and amortization). Fixed assets are typically acquired by permanent capital, which may have been provided by either creditors or owners or some combination of the two. The purpose of this ratio is to measure the relative proportions that have come from each source. Since the fixed assets are usually pledged against the long-term debt, the ratio of funded debt to net plant would be of major importance to these creditors. The ratio of funded debt to net plant, as a comparison of fixed assets and long-term debt, has its counterpart in the current ratio, which makes a similar comparison among the current assets and liabilities.

This ratio has not as yet gained wide acceptance in financial circles. It is included here because it is a ratio which should be substantially affected by capitalization.

Minor Ratios

The ratios which are affected by capitalization of leases, but which play a less important role in the financial analysis of a firm, or else are relatively unaffected by capitalization, are considered in this section. The eight ratios included in this classification are: funded debts to net working capital, net profits on net working capital, net sales on net working capital, current debt to tangible net worth, inventory to net working capital, current debt to inventory, net working capital to net plant, and net plant to sales.

Funded Debts to Net Working Capital

An extension of the current ratio to the needs of the bondholders is found in the ratio of funded debts to net working capital. "Net working capital" may be defined as the difference between current assets and current liabilities. The "funded debts" are all long term obligations,

as represented by mortgages, bonds, debentures, term loans, serial notes, and other types of liabilities maturing more than one year from statement date.

It may be difficult to see the relationship between "net working capital" and "funded debt," since the bonds are often secured by a lien on the fixed assets rather than on current assets. In answer to this alleged inconsistency, Guthmann states:

> Actually, the bondholders are recognizing two important factors; namely, (1) the greater ease of valuing the current assets as compared with the fixed assets, and (2) the virtue of a strong working capital in supporting interest charges during a period when earnings are temporarily inadequate.[1]

Certainly it cannot be denied that a firm's current position has a direct bearing on the security of the bondholders. The current ratio is an indication of the extent to which working capital may be available to meet interest charges and other pressing requirements during a period when earnings are temporarily inadequate. The ratio of funded debts to net working capital attempts to go one step further by recognizing that the greater the funded debt, the greater the "cushion" that may be required as a "hedge" against contingencies.

The ratio of funded debts to net working capital does have some drawbacks, however. First of all, since it is so closely related to the current ratio, the weaknesses noted there are also applicable here. We cannot say that a high ratio is necessarily good or bad per se. Further, it seems difficult to see any direct relationship between "working capital" and "funded debt." This ratio is one which may deserve an occasional glance, but there are others which might command more of the attention of the bondholder.

Net Profits on Net Working Capital

The net working capital of a firm is computed by subtracting its

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[1]Guthman, op. cit., p. 161.

current liabilities from its current assets. The resulting amount represents a "cushion" which is available to the business to finance current operations. The ratio of net profits on net working capital is obtained by dividing net profits (after taxes) by the net working capital.

This ratio has been the subject of wide misuse. It implies that profits are earned on working capital only and that all other assets are non-productive parasites. An example of this misuse was presented in Chapter II where the publication of the Foundation for Management Research, "The Pros and Cons of Leasing," was discussed. Promotional literature published by leasing companies has also implied that fixed assets are "frozen" and that only working capital is essential for profitable operations. While the importance of working capital cannot be denied, it is nevertheless only one of the factors which contribute to profit. All of the resources of a firm, from whatever source supplied, jointly generate profits; and a relationship which implies otherwise is faulty and actually may be misleading.

Net Sales to Net Working Capital

The ratio of net sales to net working capital (sometimes called working capital turnover) is computed by dividing the net sales by the net working capital. The ratio recognizes that there is a direct relationship between sales and the amount of working capital required. It gives an indication of whether increased sales are being financed largely by payables or from increased working capital. The ratio is subject to all of the criticism previously made of the current ratio. Its limitations are summarized in the following statement:

> If the business suffers from a relatively high current debt--that is, has a low current ratio--the business will show a relatively higher ratio of sales to working capital. A high working capital turnover may reflect efficient receivables and merchandise turnover, but it may just as well reflect a dangerously low current ratio. But a ratio which can tell either of such opposite stories is a blur of a number of relationships.[1]

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[1] Ibid., p. 122.

Current Debt to Tangible Net Worth

The ratio of current debt to tangible net worth is obtained by dividing the current debt by the total stockholders' equity. This is another of the many ratios designed to measure the relationship of debt to equity and to assure that an adequate proportion of the funds are supplied by the owners. Dun and Bradstreet cautions that "a business begins to pile up trouble when the relationship between Current Debt and Tangible Net Worth exceeds 80 per cent."[1]

Inventory to Net Working Capital

The ratio of inventory to net working capital is calculated by dividing the merchandise inventory by the net working capital. The purpose of the ratio is to measure the proportion of working capital that is tied up in unsold inventory. If the ratio becomes too high, then the firm will likely experience difficulty in meeting its current obligations. This ratio would be most meaningful when used in connection with the inventory turnover and the current ratio.

Current Debt to Inventory

The ratio of current debt to inventory is obtained by dividing the current liabilities by the merchandise inventory. The purpose of the ratio is to measure the extent to which a firm relies on the funds provided by the sale of merchandise to meet its current obligations. Since a large proportion of the sales of many firms are made on credit, the current ratio is probably a better measure of a firm's current debt paying ability.

Net Working Capital to Net Plant

The ratio of net working capital to net plant is computed by dividing the net working capital by the total fixed assets (net of depreciation

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[1]Dun and Bradstreet, Inc., op. cit.

and amortization). The relationship seems to be rather meaningless, but presumably is intended to show the relative proportions of permanent capital which are tied up in working capital and in fixed assets.

Net Plant to Sales

The ratio of net plant to sales (sometimes called the plant turnover) is computed by dividing the total fixed assets (net of depreciation and amortization) by sales. The result is the dollar of sales during the year per dollar of plant investment. The objective of the ratio is to measure the efficiency with which fixed assets have been administered. Guthmann lists two major advantages of high plant turnover:

> 1. The larger the volume of business with respect to investment, the less is the per cent of net profit on sales required to earn a given rate of return on investment.
>
> 2. The company with a low ratio is presumably obliged to spread the fixed expenses resulting from the use of the fixed assets, such as depreciation and interest, and generally insurance and taxes, over a relatively smaller volume of business, and consequently is likely to be at a disadvantage from a competitive standpoint.[1]

The ratio of net plant to sales may fail to measure accurately the efficiency of management in administering fixed assets because:

> 1. Price level changes. Sales tend to vary with changes in the level of prices, but plant usually remains on the books at cost until its parts are worn out or discarded and new units entered at the going level of prices.
>
> . . . . . .
>
> 2. Operating functions assumed. Sometimes two concerns are engaged in apparently the same business, but upon closer scrutiny it is found that one performs more functions than the other--a fact that justifies additional investment.
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> . . . . . .

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[1]Guthmann, op. cit., p. 162.

3. Depreciation reserves. If the net fixed assets after the deduction of depreciation are used in this ratio, two concerns with equal plant costs but of different ages might show, as a result, different plant turnovers.[1]

The Impact of Capitalization

The fifteen ratios discussed in the preceding section were calculated from the financial statements presented in Appendix III. Separate computations were made from the figures "as reported" and the amounts "as adjusted" in order to isolate the effect of capitalization. The ratios "before capitalization" and "after capitalization" for the eleven selected companies are summarized in Exhibit 22.

Capitalization Improves Ratios

An analysis of the data in Exhibit 22 soon makes it apparent that some of these ratios are affected quite substantially. This fact immediately raises several questions. First of all, what causes the ratios to be so affected, i.e., what happens to the components from which the ratios are computed? This is answered in the first two columns of Exhibit 23. The first column indicates that ten of the numerators used in computing the ratios increased, four remained unchanged, and only one decreased, as a result of capitalization. In the case of the denominators (column 2), six were greater, four were smaller, and five remained unchanged after capitalization.

A second question raised by the fact that ratios are substantially changed by capitalization is "in what direction?" i.e., do the ratios after capitalization appear to present an "improved" financial position over that presented prior to capitalization? This question is answered in column three of Exhibit 23, where it is noted that in all but two instances capitalization presents a less favorable financial position than does conventional reporting.

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[1] Ibid., pp. 162-163.

EXHIBIT 22

RATIOS AFFECTED BY CAPITALIZATION FOR ELEVEN SELECTED COMPANIES

	Ratio Expressed as	Penn Fruit Company		Safeway Stores, Inc.		Allied Stores Corp.		F. W. Woolworth Co.	
		BC	AC	BC	AC	BC	AC	BC	AC
Major Ratios:									
Current Ratio	times	2.78	1.85	1.77	1.37	3.42	2.80	3.43	2.13
Debt to Equity	%	55.0	219.7	70.8	239.9	51.9	152.6	41.4	128.2
Debt to Total Capital	%	35.5	68.7	41.5	70.6	34.2	60.4	29.3	56.2
Return on Total Capital	%	4.8	5.4	8.3	7.1	4.1	4.6	7.7	7.0
Times Interest Charges Earned	times	6.3	1.6	20.1	2.2	12.5	2.0	8.4	2.5
Fixed Assets to Tangible Net Worth	%	59.8	224.5	73.7	242.7	32.9	144.7	67.6	154.4
Funded Debt to Net Plant	%	37.2	76.9	18.3	68.6	63.2	79.5	39.4	67.6
Minor Ratios:									
Net Profits on Net Working Capital.	%	12.2	17.1	32.3	52.3	7.6	8.5	26.7	35.7
Net Sales to Net Working Capital	times	14.3	20.0	22.9	37.1	4.8	5.2	5.9	7.9
Current Debt to Tangible Net Worth	%	28.7	43.1	54.1	70.1	31.1	37.7	14.8	23.8
Inventory to Net Working Capital	%	107.6	149.9	158.3	256.8	66.9	73.5	99.6	133.2
Current Debt to Inventory	%	52.4	78.6	82.0	106.2	61.3	75.6	41.3	66.5
Funded Debt to Net Working Capital	%	43.7	472.4	32.4	648.3	27.5	169.5	74.3	388.7
Net Working Capital to Net Plant	%	85.2	16.3	56.6	10.6	230.2	46.9	53.1	17.4
Net Plant to Sales	%	8.2	30.8	7.7	25.4	9.1	40.8	32.0	73.1
Other Ratios:									
Leased Assets to Total Assets	%		51.5		49.7		44.5		38.0
Leased Assets to Net Plant	%		73.2		69.7		77.6		56.2

BC = Before Capitalization

AC = After Capitalization

continued

EXHIBIT 22 - Continued

	Ratio Expressed as	Peoples Drug Stores, Inc.		Bond Stores Inc.		Consolidated Food Corp.		Textron Inc.	
		BC	AC	BC	AC	BC	AC	BC	AC
Major Ratios:									
Current Ratio	times	2.56	1.95	7.50	6.16	2.25	2.01	3.40	3.35
Debt to Equity	%	34.5	111.9	15.8	65.8	71.6	111.2	128.1	153.0
Debt to Total Capital	%	25.6	52.8	13.7	39.7	41.7	52.6	56.2	60.5
Return on Total Capital	%	4.3	4.9	4.0	4.6	7.0	6.8	7.1	6.9
Times Interest Charges Earned	times	27.2	2.1	320.6	2.5	6.1	3.3	3.8	3.1
Fixed Assets to Tangible Net Worth	%	47.6	125.0	23.1	73.0	52.9	92.4	68.1	93.0
Funded Debt to Net Plant	%	- -	53.6	17.1	66.4	47.9	64.2	106.8	100.8
Minor Ratios:									
Net Profits on Net Working Capital	%	10.5	13.2	6.0	6.5	17.2	19.0	15.0	15.8
Net Sales to Net Working Capital	times	7.5	9.4	2.0	2.2	10.8	12.0	4.1	4.3
Current Debt to Tangible Net Worth	%	33.6	44.0	11.9	17.3	46.3	51.8	54.6	58.4
Inventory to Net Working Capital	%	109.8	137.2	49.5	53.2	117.0	129.2	88.1	92.6
Current Debt to Inventory	%	58.5	76.7	31.1	45.2	68.5	76.6	78.2	83.8
Funded Debt to Net Working Capital	%	- -	106.4	5.1	67.5	43.8	113.4	91.9	124.5
Net Working Capital to Net Plant	%	109.8	33.4	334.6	98.4	109.3	56.6	116.2	81.0
Net Plant to Sales	%	12.2	32.0	14.9	47.2	8.4	14.7	21.2	28.9
Other Ratios:									
Leased Assets to Total Assets	%		36.6		30.2		18.7		9.9
Leased Assets to Net Plant	%		62.1		68.4		42.7		26.8

continued

EXHIBIT 22 - Continued

	Ratio Expressed as	Miller Mfg. Company		Lockheed Aircraft		Purolator Products	
		BC	AC	BC	AC	BC	AC
Major Ratios:							
Current Ratio	times	2.04	1.99	1.15	1.14	3.40	3.35
Debt to Equity	%	73.0	90.1	417.1	441.8	75.7	82.0
Debt to Total Capital	%	42.2	47.4	80.7	81.5	43.1	45.0
Return on Total Capital	%	11.5	11.0	(6.8)	(6.2)	8.5	8.4
Times Interest Charges Earned	times	7.7	5.8	(5.5)	(4.3)	7.7	6.6
Fixed Assets to Tangible Net Worth	%	53.4	70.6	71.5	96.1	45.0	51.3
Funded Debt to Net Plant	%	33.4	47.5	54.0	62.1	85.3	86.0
Minor Ratios:							
Net Profits on Net Working Capital.	%	30.2	31.0	(74.5)	(79.6)	14.5	14.6
Net Sales to Net Working Capital	times	5.3	5.5	23.1	24.7	3.7	3.7
Current Debt to Tangible Net Worth	%	55.1	56.5	375.5	379.1	37.3	37.9
Inventory to Net Working Capital	%	111.3	114.2	305.6	326.6	76.7	77.2
Current Debt to Inventory	%	86.3	88.6	220.2	222.3	54.4	55.2
Funded Debt to Net Working Capital	%	31.1	60.0	69.2	114.3	43.0	49.6
Net Working Capital to Net Plant	%	107.3	79.2	78.0	54.3	198.5	173.2
Net Plant to Sales	%	17.5	23.1	5.5	7.5	13.7	15.6
Other Ratios:							
Leased Assets to Total Assets	%		9.0		4.6		3.4
Leased Assets to Net Plant.	%		24.3		25.7		12.1

EXHIBIT 23

THE IMPACT OF CAPITALIZATION ON SELECTED FINANCIAL RATIOS

	Effect on		Does capitalization "improve" the firm's financial position?	Does capitalization help the ratio meet its objectives?	Notes
	Numerator	Denominator			
Current ratio	NC	+	No	Yes	(1)
Debt to equity	+	NC	No	Yes	(2)
Debt to total capital	+	+	No	Yes	(3)
Return on total capital	+	+	*	Yes	(4)
Times interest charges earned	+	+	No	Yes	(5)
Net profits on net working capital	NC	-	Yes	NA	(6)
Net sales to net working capital	NC	-	Yes	NA	(7)
Fixed assets to tangible net worth	+	NC	No	Yes	(8)
Current debt to tangible net worth	+	NC	No	Yes	(9)
Inventory to net working capital	NC	-	No	Yes	(10)
Current debt to inventory	+	NC	No	Yes	(11)
Funded debt to net working capital	+	-	No	Yes	(12)
Funded debt to net plant	+	+	No	Yes	(13)
Net working capital to net plant	-	+	No	Yes	(14)
Net plant to sales	+	NC	No	Yes	(15)

*Return on total capital may or may not improve depending on the lease terms. In five of the eleven companies studied capitalization improved the return on investment.

NC = No change.

(1) The inclusion of current lease rentals makes the ratio a better measure of the current debt paying ability.

(2) By including all assets used in the business the ratio reflects more completely the relative proportion of the assets that have been furnished by owners and by creditors (outsiders).

(3) By including all assets used in the business the ratio reflects more completely the relative proportion of the assets that have been furnished by owners and by creditors (outsiders).

(4) The ratio is improved because the "return" reflects income before implied interest and "capital" includes assets furnished from all sources.

(5) The ratio better meets its objectives because all interest charges are reflected, including "hidden" interest on financial leases.

(6) This ratio reflects a misleading relationship and therefore it is not possible to say whether that relationship is improved by capitalization. See previous discussion of the ratio of net profits on net working capital.

(7) Because of the limitations of this ratio it is not possible to say whether the ratio is improved by capitalization. See previous discussion of the ratio of net sales to net working capital.

(8) All fixed assets used in the business from whatever source obtained are included in the computation of the ratio only after capitalization.

(9) Current lease rentals are included as an obligation that must be paid during the year only after capitalization.

(10) Current lease rentals are included as obligations that must be met out of net working capital only if leases are capitalized.

(11) Current lease rentals are included as an obligation that must be paid during the year only after capitalization.

(12) All current liabilities and all long-term liabilities are considered in the computation including those arising from leases.

(13) All assets used in the business are included as well as all "funds" supplied by outsiders.

(14) Since all assets are included in the computation when leases are capitalized, the ratio better reflects the proportion of capital that is tied-up in fixed assets.

(15) When leases are capitalized, this ratio reflects the fact that management should be held accountable for all assets which are used in the business.

A final question which might be raised is related to the ratio objectives which were outlined in the previous section. Does capitalization help these ratios meet their objectives, i.e., do the ratios measure what they are trying to measure more or less accurately after capitalization? This question is answered in column 4 of Exhibit 23, where it is noted that in all instances (where the ratios themselves are meaningful) the ratios are made more meaningful by capitalization.

Impact on Financial Analysis

Exhibit 23 and the discussion which follows make it clear that the ratios considered in this chapter meet their objectives better after capitalization than they do before capitalization. This fact raises another question of importance: Are the ratios changed enough to have a significant effect on financial analysis? i.e., would the decisions which the financial analyst would make based upon the analysis of these ratios be any different if leases were capitalized than if they were not?

This question is answered in part by Exhibit 24 where the eleven lessee companies are ranked both before and after capitalization for each ratio. In each case the company with the most favorable ratio is given the highest ranking. In order to isolate the effect of capitalization on any particular ratio, each one was considered independently of the others. For example, the ranking of the current ratios indicates how each company stood in relation to each of the others in regard to the current ratio only. Reading on Exhibit 24 across the lines, we find how each of the companies listed at the top ranked in regard to each of the ratios listed at the left; first, before capitalization (shown as BC), and then, after capitalization (shown as AC).

This exhibit emphasizes several important points. First of all, in all cases but one (the return on total capital) the ranking is different after capitalization than it is before. This means that, other things

EXHIBIT 24

RANKING OF LESSEE COMPANIES BY RATIO BEFORE AND AFTER CAPITALIZATION

		Penn Fruit Company	Safeway Stores, Inc.	Allied Stores Corporation	F. W. Woolworth Company	Peoples Drug Stores	Bond Stores Inc	Consolidated Food Corp.	Textron, Inc.	Miller Manufacturing Company	Lockheed Aircraft Corp.	Purolator Products, Inc.
Leased assets to total assets	BC											
	AC	11	10	9	8	7	6	5	4	3	2	1
Leased assets to net plant	BC											
	AC	11	9	10	8	7	6	5	4	3	2	1
Current ratio	BC	5	10	3	2	6	1	8	7	9	11	4
	AC	9	10	3	5	8	1	6	4	7	11	2
Debt to equity	BC	5	6	4	3	2	1	7	10	8	11	9
	AC	9	10	7	6	5	1	4	8	2	11	3
Debt to total capital	BC	5	6	4	3	2	1	7	10	8	11	9
	AC	9	10	7	6	5	1	4	8	2	11	9
Return on total capital	BC	7	3	9	4	8	10	6	5	1	11	2
	AC	7	3	9	4	8	10	6	5	1	11	2
Times interest charges earned	BC	8	3	4	5	2	1	9	10	6	11	7
	AC	10	7	9	6	8	5	3	4	2	11	1
Fixed assets to tangible net worth	BC	7	11	2	8	4	1	5	9	6	10	3
	AC	10	11	8	9	7	3	4	5	2	6	1
Funded debt to net plant	BC	5	3	9	6	1	2	7	11	4	8	10
	AC	8	7	9	6	2	5	4	11	1	3	10

Net profits on net working capital	BC	7	1	9	3	8	10	4	5	2	11	6
	AC	5	1	9	2	8	10	4	6	3	11	7
Net sales to net working capital	BC	3	2	8	6	5	11	4	9	7	1	10
	AC	3	1	8	6	5	11	4	9	7	2	10
Current debt to tangible net worth	BC	3	8	4	2	5	1	7	9	10	11	6
	AC	5	10	3	2	6	1	7	8	9	11	4
Inventory to net working capital	BC	6	10	2	5	7	1	9	4	8	11	3
	AC	9	10	2	6	8	1	7	4	5	11	3
Current debt to inventory	BC	3	9	6	2	5	1	7	8	10	11	4
	AC	7	10	4	3	6	1	5	8	9	11	2
Funded debt to net working capital	BC	7	5	3	10	1	2	8	11	4	9	6
	AC	10	11	8	9	7	3	4	6	2	5	1
Net working capital to net plant	BC	8	10	2	11	5	1	6	4	7	9	3
	AC	10	11	7	9	8	2	5	3	4	6	1
Net plant to sales	BC	3	2	5	11	6	8	4	10	9	1	7
	AC	7	5	9	11	8	10	2	6	4	1	3

BC = Before capitalization.
AC = After capitalization.

remaining equal, the financial analyst will make faulty decisions if he bases his analysis on any of the ratios (except the return on total capital) which have been computed from the figures presented in conventional financial statements.

The number of firms which were given a different ranking as a result of capitalization is also of significance. Of the eleven companies, the following number were given a different ranking after capitalization from that which they had before:

Current ratio	7
Debt to equity	9
Debt to total capital	9
Return on total capital	0
Times interest charges earned	10
Fixed assets to tangible net worth	10
Funded debt to net plant	7
Net profits on net working capital	5
Net sales to net working capital	2
Current debt to tangible net worth	7
Inventory to net working capital	5
Current debt to inventory	8
Funded debt to net working capital	11
Net working capital to net plant	11
Net plant to sales	9

In 56 per cent of the cases (92 out of 165 observations), there was a spread of two or more places between the firms' positions before and after capitalization. In 7 per cent of the cases (11 out of 165 observations), the spread was six or more places. For example, Miller Manufacturing Company ranked eighth in regard to the ratio of debt to equity prior to capitalization, but actually ranked second after giving consideration to the capitalized leases.

Exhibit 24 illustrates further that the companies which lease a high percentage of their assets are the ones which are hurt most by capitalization. The firm making the greatest use of leases, Penn Fruit Company, fell in the rankings twelve times, remained the same twice, and improved only once. At the other extreme, Purolator Products, Inc., the firm

which used leasing to the smallest degree, improved in the rankings ten times, remained unchanged four times, and dropped only once. The four firms making the greatest use of leasing fell in the rankings thirty-five times, remained unchanged fourteen times, and improved only eleven times. On the other hand, the four firms that made relatively little use of the lease as a means of financing were higher in the rankings thirty-five times, unchanged twenty-one times, and lower only five times.

Dangers of Current Reporting

Some of the dangers of current techniques for reporting of long-term leases are made more apparent by this pilot study. For example, an analysis of the published financial statements of Safeway Stores, Inc. and Consolidated Food Corporation reveals that they have almost identical ratios of debt to total capital (Safeway 41.5 per cent and Consolidated Food 41.7 per cent). Since these companies are both members of the same industry, one would conclude that from the standpoint of relative proportion of assets supplied by "outsiders" the two companies are comparable; and, other things being equal, the degree of "risk" would be the same. An investor contemplating the purchase of some stock or the banker considering a loan application would consider the companies a "standoff."

Consider now this same ratio calculated for the same two companies from financial statements in which leases have been capitalized. Instead of the almost identical ratios which were noted above, we find that Safeway has a substantially higher ratio (70.6 per cent) than does Consolidated Foods (52.6 per cent). Neither the proportion of funds supplied by outsiders nor the relative "risk" is comparable for the two firms as implied by the preceding calculations. The truth of the matter is that the ratios which were computed from the published financial statements were based

upon incomplete data and, accordingly, are inaccurate and misleading. The investor or banker acting on this information would have been misled because a very significant portion of the assets supplied by "outsiders" were omitted from the calculations.

Similar comparisons may be made with other ratios. For example, the current ratio of F. W. Woolworth Company is 3.43 times before capitalization and is comparable to the 3.40 times of the Purolator Products, Inc. Based on this comparison one might conclude that the two firms should meet their current obligations with equal ease. Comparison of the two companies after capitalization reveals that Purolator Products with a current ratio of 3.35 times is in a much stronger current position than is F. W. Woolworth Company with a current ratio of 2.13 times.

Other significant comparisons include times interest charges earned of Penn Fruit Company and Consolidated Food Corporation of 6.3 times and 6.1 times, respectively, before capitalization and 1.6 times and 3.3 times, respectively, after capitalization. The ratio of fixed assets to tangible net worth before capitalization of F. W. Woolworth at 67.6 per cent is comparable to that of Textron, Inc., at 68.1 per cent. After capitalization these same ratios are 154.4 per cent and 93.0 per cent, respectively.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Summary

The purpose of this study has been to measure the impact of leasing on conventional financial analysis. It has been concerned, first, with an evaluation of current reporting techniques, and second, with an appraisal of the suggested alternatives. The major criterion used in making this evaluation has been the impact that each proposal would have on conventional financial ratios.

Long-term leases were classified as service or financial, the distinction being made on the basis of when the lessor performed his part of the contract. It was found that the economic and financial facts surrounding each type of lease were distinctive and accordingly required very different recording in the books of account, as well as disclosure in the financial statements. It was noted that current reporting was adequate with regard to the service lease and that it was proper to report this type of transaction on the balance sheet only to the extent that rentals were prepaid or accrued.

Current reporting of financial leases, however, was found to be unsatisfactory because it ignored the similarities between the lease and the more conventional forms of debt financing. This failure to recognize leasing as a means of financing resulted in distorted and misleading financial statements. This deficiency in current reporting was traced, first, to inadequate requirements which were laid down by the American Institute of Certified Public Accountants and the Securities and Exchange Commission, and second, to the failure of the accounting profession to comply with the obvious intent of these requirements.

The arguments for and against leasing were examined in an attempt to determine the extent to which inadequacies in current reporting may have contributed to the wide-spread use of the lease as a financing device. In this connection, it was noted that much of the case presented in favor of leasing rested upon "illusory" arguments which were based upon faulty reporting. Although these arguments were initially advanced by the leasing industry, they soon became accepted as factual by many "independent" parties. This general misunderstanding of the nature and limitations of the lease probably contributed to its rapid growth and carried the transaction well beyond the bounds which could be justified on economic grounds. It was noted that to the extent that current reporting contributed to this unhealthy condition, the accounting profession was responsible.

Three alternatives to the current techniques for reporting financial leases were examined: first, the supplementary schedule; second, capitalization with the amounts shown short in the balance sheet; and third, capitalization with the amounts included in the balance sheet totals.[1] The first of these proposals was dismissed on the grounds that the supplementary schedule was nothing more than an expanded form of footnote. The second proposal, capitalization with the amounts shown short, was not considered as a satisfactory solution because it too failed to reflect fully the financial implications of lease agreements. It was regarded as even less satisfactory than the supplementary schedule, since under the former the reader may have been misled by the fact that the amounts were shown in the body of the balance sheet and yet did not "count."

Capitalization with the amounts included in the balance sheet totals was found to be the only proposal which was examined that could satisfactorily overcome the deficiencies in current reporting previously mentioned. Under this proposal the capitalized value of the future lease

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[1]Hereafter referred to as capitalization.

rentals would be included among the firm's assets as "rights to use leased property at discounted amount of related long-term rental obligations." This same amount would be included among the firm's liabilities, the current portion under the caption "current lease rentals," and the balance under the heading "rental obligations under long-term leases (discounted at implicit rates of interest)." The appropriate amount would be computed by discounting the rentals payable during the term of the lease at the interest rate implied in the particular agreement.

This latter proposal recognized the economic and financial fact that leasing was a means of financing and that as such it should be fully disclosed in the published financial statements. Contrary to the objections which were raised against it, capitalization was found to be deeply rooted in accounting theory and completely compatible with current principles of accounting.

In order to compare capitalization with current reporting, it was necessary to reconstruct some financial statements with capitalized amounts included therein. This proved to be a difficult task because sufficient information was typically not provided in the published financial statements to enable the reader to make a reasonable estimate of the discounted value of the lease rentals. The rentals were usually shown for only one year, or else covered a period two broad to be meaningful. Expiration dates were rarely shown, and in no case was the implied interest rate or original cost indicated. This lack of sufficient data not only limited this thesis to a pilot study of eleven companies, but also illustrated further the inadequacies in current reporting. It was noted that the accountant has not only failed to reflect leases in the balance sheet, where they belong, but worse than this, he has failed even to provide sufficient information in the footnotes to enable someone else to make the necessary adjustments.

Fifteen financial ratios were considered in evaluating the impact of leasing on conventional financial analysis. The ratios considered were: the current ratio, the debt to equity ratio, the ratio of debt to total capital, the return on total capital, times interest charges earned, the ratio of fixed assets to tangible net worth, the ratio of funded debt to net plant, the ratio of net profits on net working capital, the ratio of net sales to net working capital, the ratio of current debt to tangible net worth, the ratio of inventory to net working capital, the current debt to inventory ratio, the ratio of funded debt to net working capital, the ratio of net working capital to net plant, and the ratio of net plant to sales.

These ratios, after capitalization, were substantially different from those which were computed before capitalization. Those which were most affected by capitalization were: debt to equity, debt to total capital, times interest charges earned, fixed assets to tangible net worth, funded debt to net plant, funded debt to net working capital, and net working capital to net plant.

The ratios were analyzed to determine what impact capitalization would have upon them. It was found that twelve of the ratios made the firm's financial position appear to be worse after capitalization. One of the ratios (return on total capital) followed no definite pattern, i.e., in some instances the firm's position was "improved" by capitalization, and in other cases just the reverse was true. Two of the ratios (net profits on net working capital and net sales to net working capital) presented a more favorable financial position after capitalization. Both of these latter ratios, however, were found to have limitations which minimized the importance of this implied improvement in financial position. All of the ratios, except the two just noted, were found to be more meaningful after capitalization.

All eleven companies analyzed in the study were ranked both before and after capitalization for each ratio. In all cases but one (the return on total capital) the ranking was different after capitalization than it was before. This was interpreted to mean, other things remaining equal, that the financial analyst would have made faulty decisions had he based his evaluation of these firms on the financial ratios computed from conventional financial statements.

Conclusions

Many important conventional financial ratios are made meaningless by current reporting practices with regard to extensive financial leasing. The ratios which are most affected are those concerned with fixed assets, long-term liabilities and interest charges. The fact that the ratios do not accurately measure what they are intended to measure does not stem from weaknesses in the ratios themselves but instead from faulty procedures for reporting leases which are primarily financial in nature.

Capitalization is a sound process for overcoming the weaknesses in current reporting and for properly reflecting the financial impact of leasing in the financial statements. It is a process which is compatible with generally accepted accounting principles and merely an extension of the long-recognized concept of looking through legal details to the financial and economic facts. Because capitalization recognizes leasing for what it really is, a means of financing, the financial ratios which are computed from statements containing capitalized leases <u>are meaningful</u>. These ratios are, of course, subject to the general limitations of ratio analysis; however, they are much more valid than ratios computed from conventional financial statements and therefore make inter-company comparisons much more meaningful.

Although financial statements are basically representations of management, the accounting profession must assume the responsibility for the inadequacies in current reporting. There are generally accepted accounting and auditing standards upon which the financial statements are based, and these are determined not by management but by the accounting profession. Business managements have tended to lean on minimum standards of reporting and accordingly have not capitalized leases in their financial statements because no requirement to do so has existed.

Although no organization has the power to decree accounting and reporting standards, the American Institute of Certified Public Accountants and the Securities and Exchange Commission do have a profound influence on their development. These organizations must take the initiative if any widespread change is to be adopted. Some day the truth about leasing will be out and the "illusions" will vanish. If the accounting profession takes the initiative in bringing this about, the prestige of the profession will be enhanced. On the other hand, if no action is taken by the accounting profession until the financial analysts have perfected techniques for revising the published financial statements so that they do reflect the financial facts, then it is this latter group who will be considered the professionals. In this case, the accounting profession will take a big step backward toward the long-accepted stereotype of bookkeeping.

Accounting is a profession, and as such must assume the responsibility for adopting new reporting techniques to reflect properly the changing nature of the business world. Leasing has been developed by the financial world as a new means of financing, and the accounting profession must quickly respond by adopting a new device which will properly reflect this new transaction. This thesis has demonstrated

that capitalization is an effective way of reflecting leases in the financial statements and that when this is done these statements will be more useful for purposes of financial analysis.

BIBLIOGRAPHY

Books

American Institute of Certified Public Accountants. Accounting Research and Terminology Bulletins. Final ed. New York: American Institute of Certified Public Accountants, 1961.

American Institute of Certified Public Accountants. Accounting Trends and Techniques. 4th-15th eds. New York: American Institute of Certified Public Accountants, 1950-1961.

Arthur Andersen and Co. Accounting and Reporting Problems of the Accounting Profession. Chicago: Arthur Andersen and Co., 1960.

Bell, William H. and Johns, Ralph S. Auditing. New York: Prentice-Hall, Inc., 1952.

Cohen, Albert H. Long-Term Leases--Problems of Taxation, Finance and Accounting. Ann Arbor: University of Michigan Press, 1954.

Connelly, William F., Mitchell, Robert B., and Tunick, Stanley B. (ed.). Prentice-Hall 1962 Federal Tax Course. Student ed. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961.

Eiteman, Wilford John and Davisson, Charles N. The Lease as a Financing and Selling Device. Ann Arbor: School of Business Administration, University of Michigan, 1951.

Foulke, Roy A. Practical Financial Statement Analysis. 5th ed. New York: McGraw-Hill Book Company, Inc., 1961.

Greenfield, Harvey and Griesinger, Frank K. Sale-Leasebacks and Leasing In Real Estate and Equipment Transactions. New York: McGraw-Hill Book Company, Inc., 1958.

Guthman, Harry G. Analysis of Financial Statements. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1953.

Hanna, John and MacLachlan, James Angell. The Bankruptcy Act. Enacted July 2, 1898, as amended through December 31, 1952, with annotations. 5th ed. Brooklyn: The Foundation Press, Inc., 1953.

Hart, William L. Tables for Mathematics of Investment. 3rd ed. Boston: D. C. Heath and Co., 1946.

Holmes, Arthur W. Auditing: Principles and Procedure. 5th ed. Homewood, Illinois: Richard D. Irwin, Inc., 1959.

Husband, George R. Accounting--Administrative and Financial. New York: Chilton Company--Book Division, 1959.

Johnson, Arnold W. Auditing: Principles and Case Problems. New York: Rinehart and Company, Inc., 1959.

Johnson, Robert W. Financial Management. Boston: Allyn and Bacon, Inc., 1959.

Lewis, Ronello B. Financial Analysis for Management. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1959.

McMichael, Stanley L. and O'Keefe, Paul T. Leases--Percentage, Short and Long Term. 5th ed. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959.

Moonitz, Maurice and Staehling, Charles C. Accounting--An Analysis of Its Problems. Vol. I. Brooklyn, New York: The Foundation Press, 1952.

Myer, John N. Financial Statement Analysis, 2d ed. New York: Prentice-Hall, Inc., 1952.

Paton, William A. and Paton, William A., Jr. Corporation Accounts and Statements. New York: The Macmillan Company, 1955.

Sweetser, Albert G. Financing Goods. Ann Arbor, Michigan: Edwards Brother, Inc., 1957.

Wall, Alexander. How To Evaluate Financial Statements. New York: Harper and Brothers, 1936.

Wall, Alexander and Duning, R. W. Ratio Analysis of Financial Statements. New York: Harper and Brothers Publishers, 1928.

Articles and Periodicals

Ballard, Roger E. and Gilbert, Allan A. "How to Quantify Decision-Making," Business Horizons, Vol. I (Winter, 1958), 73-79.

Baltz, Robert W. "Equipment Leasing and Generally Accepted Accounting Principles," The Illinois C.P.A., Vol. XXIII (Autumn, 1960), 12-18.

Blough, Carmen G. Letter regarding "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 21-22.

Booker, Claude H., Jr. "The Leasing Arrangement," Bulletin of the Robert Morris Associates, Vol. XLIII (October, 1960), 29-37.

Borker, Wallace J. Letter "In Defense of Leasing," The Controller, Vol. XXX (February, 1962), 52.

Boyle, Alexander R. M. and Samuelson, Victor E. "Disclosure of Long-Term Leases in Financial Statements," Business Review, Vol. XXI, No. 1, 22-37.

Busko, Fred J. "Leased Tires Inventory," NAA Bulletin, Vol. XLI (October, 1959), 24.

Cannon, Arthur M. "Danger Signals to Accountants in New Lease Financing," The Journal of Accountancy, Vol. LXXXV (April, 1948), 312-19.

Cannon, Arthur M. Letter regarding "Long-Term Leases," The Journal of Accountancy, Vol. CXI (May, 1961), 34.

Carroll, Charles A. "Long-Term Leases as a Financing Device," NAA Bulletin, Vol. XLI (May, 1960), 19-24.

Carson, A. B. "Profile of a Profession," The Journal of Accountancy, Vol. CVII (January, 1959), 50-56.

Charlton, W. E. "Rental vs. Purchase," in Data Processing; 1958 Proceedings, ed. Charles H. Johnson. Atlantic City, New Jersey: National Machine Accountants Association, 1958, 308-15.

Cohen, Albert H. "The Future of Lease Financing Under New Depreciation Rules," The Journal of Accountancy, Vol. XCVIII (August, 1954), 189-96.

Combs, Roy E. "Economic and Accounting Aspects of Leasing vs. Purchasing Industrial Equipment," Management Controls, Vol. VII (July, 1960), 136-142.

Cook, Donald C. Letter regarding "Long-Term Leases," The Journal of Accountancy, Vol. CXI (May, 1961), 33-34.

Denonn, Lester E. Letter regarding "Long-Term Leases," The Journal of Accountancy, Vol. CXI (May, 1961), p. 34.

Durand, D. "The Cost of Capital, Corporation Finance, and the Theory of Investment: Comment," The American Economic Review, Vol. XLIX (September, 1959), 639-54.

Foulke, Roy A. "Financial Statements and Ratio Analysis," in Standard Handbook for Accountants, ed. J. K. Lasser, Tax Institute. New York: McGraw-Hill Book Company, Inc., 1956, 3-36.

Gant, Donald R. "A Critical Look at Lease Financing," The Controller, Vol. XXIX (June, 1961), 274-312.

Gant, Donald R. "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (March-April, 1959), 121-42.

Gardner, Frank B. "Data Processing Systems--Rent or Buy?" in Data Processing; 1958 Proceedings, ed. Charles H. Johnson. Atlantic City, New Jersey: National Machine Accountants Association, 1958, 316-23.

Griesinger, Frank K. "Equipment Leases Can Schedule Payments, and Deductions, to Avoid Tax Hazards," The Journal of Taxation, Vol. XIII (October, 1960), 226-27.

Griesinger, Frank K. "Pros and Cons of Leasing Equipment," Harvard Business Review, Vol. XXXIII (March-April, 1955), 75-89.

Hennessy, John L. "Recording Lease Obligations and Related Property Rights," The Journal of Accountancy, Vol. CXI (March, 1961), 40-46.

Hiemstra, James W. Letter regarding "Long-Term Leases," The Journal of Accountancy, Vol. CXI (May, 1961), 34-35.

Howarth, E. Michael. "General Recognition of Accountancy as a Profession," The Canadian Chartered Accountant, Vol. LXIX (December, 1956), 491-94.

Inglis, John B. Letter regarding "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 22.

Ivimey, John R. Letter regarding "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 20-21.

Jacobs, S. Ralph. Letter "In Defense of Leasing," The Controller, Vol. XXX (February, 1960), 52-54.

Keenan, Bennett R. Letter "In Defense of Leasing," The Controller, Vol. XXX (February, 1962), 50-52.

Kelly, Robert A. "Have You Tried Leasing Your Product?" Sales Management, Vol. LXXXII (June 19, 1959), 33-35.

Knouss, Francis T. "You Can Rent It--But Should You?" NAA Bulletin, Vol. XLI (October, 1959), 73-80.

Littleton, A. C. "Characteristics of a Profession," New York Certified Public Accountant, Vol. XXII (April, 1952), 207-11.

Lyndall, Frank S., Jr. "Leasing Equipment--What Are the Advantages?" NAA Bulletin, Vol. XLI (August, 1960), 15-18.

McEachron, William D. "Leasing: A Discounted Cash-Flow Approach," The Controller, Vol. XXIX (May, 1961), 213-19.

Meckler, H. L. Letter regarding "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 20.

Modigliani, F. and Miller, M. H. "The Cost of Capital, Corporation Finance, and The Theory of Investment," The American Economic Review, Vol. XLVIII (June, 1958), 261-96.

Modigliani, F. and Miller, M. H. "The Cost of Capital, Corporation Finance, and the Theory of Investment: Reply," The American Economic Review, Vol. XLIX (September, 1959), 655-69.

Myers, John H. "Presentation of Long-Term Lease Liabilities and the Balance Sheet," The Accounting Review, Vol. XXIII (July, 1948), 289-95.

Phelps, Clyde William. "Small Business and Motor Vehicle Leasing," Credit and Financial Management, Vol. LXI (May, 1959), 20-23, 32.

Rabun, Ted M. "Rebuttal to Zises' Comments on Lease Financing," The Controller, Vol. XXIX (November, 1961), 522-24.

Ravenscroft, Edward A. "Return on Investment: Fit the Method to Your Need," Harvard Business Review, Vol. XXXVIII (March-April, 1960), 97-109.

Rhodes, Jack. "Financial Leases Belong on the Balance Sheet," NAA Bulletin, Vol. XLII (December, 1960), 83-91.

Rickey, Kenneth R. "Including All Leases on the Balance Sheet--A First," NAA Bulletin, Vol. XLI (December, 1959), 51-60.

Rickey, Kenneth R. "Measuring the Return on Capital Where Leased Properties are Involved," NAA Bulletin, Vol. XLI (August, 1960), 18-24.

Rockwood, Charles P. "The Changing Image of a Profession," The Journal of Accountancy, Vol. CX (October, 1960), 35-43.

Rush, George L. "Equipment Leasing--Gimmick or Godsend?" The Maryland CPA Quarterly, Vol. I (Spring, 1960), 6-14.

Schaff, David. "When Is a Lease a Sale for Tax Purposes?" The Controller, Vol. XXVII (February, 1959), 70-72.

Seidman, P. K. "Sale and Leaseback," Retail Control, Vol. XXVIII (May, 1960), 17-23.

Shaw, N. H. "Purchase-Lease Financing," The Canadian Chartered Accountant, Vol. LXXVI (May, 1960), 473-77.

Sheridan, Robert. "Lease It--Don't Buy It!" Management Methods, Vol. XVI (April, 1959), 44-47.

Sheridan, Robert. Letter regarding "Illusion in Leasing Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 19-20.

Sheridan, Robert. "Questions I'm Asked About Equipment Leasing," Contractors and Engineers, Vol. LVI (April, 1959), 58-62.

Shillinglaw, Gordon. "Accounting for Leased Property by Capitalization," NAA Bulletin, Vol. XXXIX (June, 1958), 31-44.

Shillinglaw, Gordon. "Leasing and Financial Statements," The Accounting Review, Vol. XXXIII (October, 1958), 581-92.

Smith, Charles J. "Shall We Own or Lease Our Automobiles and Trucks?" NAA Bulletin, Vol. XLI (September, 1959), 67-74.

Spacek, Leonard. Letter regarding "Illusion in Lease Financing," Harvard Business Review, Vol. XXXVII (July-August, 1959), 22-23.

Spaeth, Thomas N. "Discounting Differential Cost in Machine Replacement--An Outline," NAA Bulletin, Vol. XLI (June, 1960), 18-20.

Starke, Ralph G. Letter "In Defense of Leasing," The Controller, Vol. XXX (February, 1962), 50.

Steadman, Charles W. "Chattel Leasing--A Vehicle for Capital Expansion," The Business Lawyer, Vol. XIV (January, 1959), 523-50.

Sykes, Allen. "Lease or Buy--An Exercise In Economic-Accounting Arithmetic," Accountancy, Vol. LXXI (March, 1960), 153-56.

Vancil, Richard F. and Anthony, Robert N. "The Financial Community Looks at Leasing," Harvard Business Review, Vol. XXXVII (November-December, 1959), 113-30.

Vancil, Richard F. "Lease or Borrow--New Method of Analysis," Harvard Business Review, Vol. XXXIX (September-October, 1961), 122-36.

Vancil, Richard F. "Lease or Borrow--Steps in Negotiation," Harvard Business Review, Vol. XXXIX (November-December, 1961), 138-59.

Wilson, Donald L. "When Is a 'Lease' a Lease?" Taxes, Vol. XL (January, 1962), 13-21.

Zises, Alvin. "Disclosure of Long-Term Leases," The Journal of Accountancy, Vol. CXI (February, 1961), 37-47.

Zises, Alvin. Letter regarding "Critical of 'A Critical Look. . .'" Letter to the Editor. The Controller, Vol. XXIX (September, 1961), 414-23.

Zises, Alvin. Letter regarding "Recording Lease Obligations," The Journal of Accountancy, Vol. CXI (June, 1961), 28-31.

Annual Reports

Air Reduction Company, Incorporated, year ended December 31, 1960.

Alco Products, Incorporated, year ended December 31, 1960.

Allied Stores Corporation, year ended January 31, 1961.

The American Hardware Corporation, year ended December 31, 1960.

Arden Farms Company, year ended December 31, 1960.

Bond Stores, Incorporated, year ended July 31, 1960.

Burroughs Corporation, year ended December 31, 1960.

Calumet and Hecla, Incorporated, year ended December 31, 1960.

Canada Dry Corporation, year ended September 30, 1960.

Century Electric Company, year ended December 31, 1960.

Consolidated Foods Corporation, year ended June 30, 1961.

Crown Zellerbach Corporation, year ended December 31, 1960.

Dresser Industries, Incorporated, year ended October 31, 1960.

Erie Forge and Steel Corporation, year ended April 30, 1961.

Fairbanks Whitney Corporation, year ended December 31, 1960.

Falstaff Brewing Corporation, year ended December 31, 1960.

Federated Department Stores, Incorporated, year ended January 28, 1961.

The Garrett Corporation, year ended June 30, 1961.

W. T. Grant Company, year ended January 31, 1961.

Interstate Bakeries Corporation, year ended December 31, 1960.

Kayser-Roth Corporation, year ended June 30, 1961.

Lerner Stores Corporation, year ended January 31, 1961.

Lockheed Aircraft Corporation, year ended December 25, 1960.

R. M. Macy and Company, Incorporated, year ended July 29, 1961.

The May Department Stores Company, year ended January 31, 1961.

Maremont Corporation, year ended December 31, 1960.

Miller Manufacturing Company, year ended September 30, 1960.

Mohasco Industries, Incorporated, year ended December 31, 1960.

J. J. Newberry Company, year ended December 31, 1960.

Penn Fruit Company, Incorporated, year ended August 26, 1961.

J. C. Penney Company, year ended January 31, 1961.

Peoples Drug Stores, Incorporated, year ended December 31, 1960.

Pepsi-Cola Company, year ended December 31, 1960.

Purolator Products, Incorporated, year ended December 31, 1960.

The Ryan Aeronautical Company, year ended October 31, 1960.

Safeway Stores, Incorporated, Year ended December 31, 1960.

Sears, Roebuck and Company, year ended January 31, 1961.

Sinclair Oil Corporation, year ended December 31, 1960.

Textron, Incorporated, year ended December 31, 1960.

Montgomery Ward and Company, Incorporated, year ended February 1, 1961.

F. W. Woolworth Company, year ended December 31, 1960.

Other Sources

Barr, Andrew. Letter from Mr. Barr, Chief Accountant, Securities and Exchange Commission, Washington 25, D. C., January 3, 1962.

Bytwork, Alvin Jay. "The Effectiveness of Alternatives to Purchase in the Marketing of Construction Equipment through Distributors." Unpublished Ph.D. dissertation, Michigan State University, 1961.

Cone, Keith G. "Is Leasing the Answer?" Reprint of a talk given by Keith G. Cone, Vice President, La Salle National Bank, Chicago, Illinois, before the Installment Credit Section, Texas Bankers Association, Hotel Texas, Fort Worth, Texas, September 15, 1958.

Cook, Donald C. "Memorandum Re: January 1961 Draft Report, Accounting Research Division, A.I.C.P.A., Entitled 'Reporting of Leases in Financial Statements.'" A paper presented to the Board of Directors of the Edison Electric Institute, March 16, 1961.

Dun and Bradstreet, Inc. 14 Important Ratios in 72 Lines of Business. New York: Dun and Bradstreet, Inc., 1961.

Gant, Donald R. "Leasing vs. Ownership to the Investment Banker." Reprint of a speech made to the American Petroleum Institute in June, 1961.

Gustin, Ralph L., Jr. "Financing by Contract and by Lease--Some Considerations." Paper read before The Association of Life Insurance Counsel, Tuesday, December 10, 1957, at The Plaza, New York, New York, by Ralph L. Gustin, Jr., Second Vice-President and Counsel, John Hancock Mutual Life Insurance Company, Boston, Mass.

Keenan, Bennett R. "Financing a Leasing Corporation." A paper submitted in partial fulfillment of the requirements of the Stonier Graduate School of Banking conducted by the American Bankers Association at Rutgers University and prepared by Bennett R. Keenan, Assistant Vice-President, New England Merchants Bank of Boston, June, 1960.

Myers, John H. "Long-Term Leases Research Project." Address at the technical session "Progress in Accounting Research" at the 74th Annual Meeting of the American Institute of Certified Public Accountants, Monday, October, 30, 1961, at McCormick Place, Chicago, Illinois.

Paffhausen, J. V. Letter from Mr. Paffhausen, Vice-President, A. H. Gruetzmacher and Company, Mortgage Bankers, 39 S. La Salle Street, Chicago 3, Illinois, November 27, 1961.

Sanzo, Richard. Letter from Mr. Sanzo, Senior Editor, Business Education Division, Dun and Bradstreet, Inc., New York 16, New York, November 27, 1961.

Sanzo, Richard. Ratio Analysis for Small Business. Small Business Management Series No. 20 (2d ed.). Washington, D. C.: Small Business Administration, 1960.

Seawell, Lloyn Vann. An Evaluation of Selected Industrial Corporation Annual Reports for Compliance with the Accounting Research Bulletins of the AICPA.

The Foundation for Management Research. Advantages and Disadvantages of Auto Fleet Leasing. A study comparing company ownership, salesman ownership, and leasing. Chicago, Illinois: The Foundation for Management Research, 1959.

The Foundation for Management Research. The Pros and Cons of Leasing. A study for smaller manufacturers, department stores, supermarkets. Chicago, Illinois: The Foundation for Management Research, 1960.

Trapnell, William C. Letter from Mr. Trapnell, Second Vice-President and Secretary, Provident Mutual Life Insurance Company of Philadelphia and Chairman of the Government Relations Committee of the Financial Analysts Federation, September 27, 1961.

United States Leasing Corporation. The Engineered Equipment Lease. Promotional pamphlet of the United States Leasing Corporation, copyright 1961.

United States Securities and Exchange Commission. Regulation S-X, Form and Content of Financial Statements. Washington, D.C.: U. S. Government Printing Office, 1961.

Vancil, Richard Franklin. "Lease Financing of Airline Equipment." Unpublished D.B.A. dissertation, Harvard University, 1960.

Witherby, Frederick R. H. "Personal Property Lease Financing--The Lender's Point of View." Paper read before The Association of Life Insurance Counsel, Monday, May 8, 1961, at The Greenbrier, White Sulphur Springs, West Virginia, by Frederick R. H. Witherby, Associate Counsel, New England Mutual Life Insurance Company, Boston, Mass.

Zises, Alvin. "Full Disclosure of All Contractual Commitments Including Long-Term Leases--The Question of Capitalization." A paper presented at a meeting of Robert Morris Associates, Chapter 10 (New England), November 28, 1960.

APPENDIXES

APPENDIX I

LIST OF 44 LESSEE COMPANIES

Arden Farms Company; 1900 West Slauson Avenue; Los Angeles 54, California.

Bond Stores, Incorporated; Fifth Avenue at 35th Street; New York 1, New York.

Falstaff Brewing Corporation; 5050 Oakland Avenue; St. Louis, Missouri.

Mohasco Industries, Incorporated; Amsterdam, New York.

Peoples Drug Stores, Incorporated; 60 Florida Avenue, N.E.: Washington 2, D. C.

Sinclair Oil Corporation; 600 Fifth Avenue; New York 20, New York.

Dresser Industries, Incorporated; Republic National Bank Building; P. O. Box 718; Dallas 21, Texas.

Lockheed Aircraft Corporation; P. O. Box 551; Burbank, California.

Montgomery Ward and Company, Incorporated; 619 West Chicago Avenue; Chicago 7, Illinois.

Sears, Roebuck and Company; 925 South Homan Avenue; Chicago 7, Illinois.

Crown Zellerback Corporation; 1 Bush Street; San Francisco 19, California.

Erie Forge and Steel Corporation; Erie, Pennsylvania.

The May Department Stores Company; 6th and Olive Streets; St. Louis, Missouri.

The Ryan Aeronautical Company; 6 State Street; Bangor, Maine.

Safeway Stores, Incorporated; 4th and Jackson Streets; Oakland 4, California.

Allen Industries, Incorporated; Leland Avenue at G. T. R. R.; Detroit 7, Michigan.

The American Hardware Corporation; New Britain, Connecticut.

Federated Department Stores, Incorporated; 222 West 7th Street; Cincinnati 2, Ohio.

W. T. Grant Company; 1441 Broadway; New York 18, New York.

Keystone Steel and Wire Company; Peoria 7, Illinois.

Purolator Products, Incorporated; 970 New Brunswick Avenue; Rahway, New Jersey.

Canada Dry Corporation; 100 Park Avenue; New York 17, New York.

R. H. Macy and Company, Incorporated; 151 West 34th Street; New York 1, New York.

Pepsi-Cola Company; 500 Park Avenue; New York 22, New York.

Alco Products, Incorporated; 530 Fifth Avenue; New York 36, New York.

Calumet and Hecla, Incorporated; 122 South Michigan Avenue; Chicago 3, Illinois.

Interstate Bakeries Corporation; 12 East Armour Blvd.; Kansas City 11, Missouri.

Lerner Stores Corporation; 354 Park Avenue South; New York 10, New York.

J. J. Newberry Company; 245 Fifth Avenue; New York 16, New York.

Penn Fruit Company, Incorporated; Grant Avenue and Blue Grass Road, Philadelphia 15, Pennsylvania.

Air Reduction Company, Incorporated; 150 East 42nd Street; New York 17, New York.

Consolidated Foods Corporation; 135 South La Salle Street; Chicago 3, Illinois.

The Garrett Corporation; 9851-9951 Sepulveda Blvd.; Los Angeles 45, California.

Miller Manufacturing Company; 17640 Grand River Avenue; Detroit 27, Michigan.

Saco-Lowell Shops; 60 Batterymarch Street; Boston 10, Massachusetts.

Textron Incorporated; 10 Dorrance Street; Providence 3, Rhode Island.

National Cylinder Gas Company; (now Chemetron Corporation); 840 N. Michigan Avenue; Chicago 11, Illinois.

Northrop Aircraft, Incorporated; (now Northrop Corporation); 9744 Wilshire Blvd.; Beverly Hills, California.

J. C. Penney Company; 330 West 34th Street; New York 1, New York.

F. W. Woolworth Company; Woolworth Building; New York 7, New York.

Century Electric Company; 1806 Pine Street; St. Louis, Missouri.

Burroughs Corporation; 6071 Second Avenue; Detroit 32, Michigan.

Allied Stores Corporation; 401 Fifth Avenue; New York 16, New York.

Kayser-Roth Corporation; 425 Fifth Avenue; New York 16, New York.

APPENDIX II

SCHEDULES OF LEASE RENTALS

APPENDIX II-1
PENN FRUIT COMPANY
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$3,467,817		
1962	3,467,817		
1963	3,467,817		
1964	3,467,817		
1965	3,467,817	6.801692	$23,587,000
1966	3,467,817		
1967	3,467,817		
1968	3,467,817		
1969	3,467,817		
1970	2,808,932		
1971	2,808,932		
1972	2,808,932		
1973	2,808,932		
1974	2,808,932		
1975	2,808,932		
1976	2,808,932	5.748666	16,147,600
1978	2,808,932		
1979	2,808,932		
1980	2,808,932		
1981	2,808,932		
1982	2,808,932		
1983	2,808,932		
1984	2,808,932		
Present value of lease rentals			$39,734,600

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-2
SAFEWAY STORES, INC.
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$41,400,000		
1962	41,400,000		
1963	41,400,000	4.917324	$203,577,200
1964	41,400,000		
1965	41,400,000		
1966	41,400,000		
1967	40,200,000	.665057	26,735,300
1968	39,000,000		
1969	39,000,000		
1970	39,000,000		
1971	39,000,000		
1972	39,000,000	4.894879	190,900,300
1973	39,000,000		
1974	39,000,000		
1975	39,000,000		
1976	39,000,000		
1977	39,000,000		
1978	21,550,000	.350344	7,549,900
1979	4,100,000		
1980	4,100,000		
1981	4,100,000		
1982	4,100,000	2.175563	8,919,800
1983	4,100,000		
1984	4,100,000		
1985	4,100,000		
1986	4,100,000		
Present value of lease rentals			$437,662,500

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-3
ALLIED STORES CORPORATION
Schedule of Lease Rentals*
(with Alstores Realty Corporation)

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$9,131,000		
1962	9,131,000		
1963	9,131,000	4.917324	$44,900,100
1964	9,131,000		
1965	9,131,000		
1966	9,131,000		
1967	9,105,000	.665057	6,055,300
1968	9,105,000	.627412	5,712,600
1969	9,072,000	.591898	5,369,700
1970	9,039,000		
1971	9,039,000	2.050991	18,538,900
1972	9,039,000		
1973	9,039,000		
1974	9,019,000	.442301	3,989,100
1975	9,000,000		
1976	9,000,000	1.532619	13,793,600
1977	9,000,000		
1978	9,000,000		
1979	8,511,000	.330513	2,813,000
1980	8,021,000		
1981	8,021,000	1.145263	9,186,200
1982	8,021,000		
1983	8,021,000		
1984	7,284,000	.246979	1,799,000
1985	6,545,000		
1986	6,545,000	1.055806	6,910,300
1987	6,545,000		
1988	6,545,000		
1989	5,496,000	.184557	1,014,400
1990	4,445,000		
1991	4,445,000	.639509	2,842,600
1992	4,445,000		
1993	4,445,000		
1994	3,796,000	.137912	523,500
1995-2005	3,145,000	1.087691	3,420,800
Present value of lease rentals			$126,869,100

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-4
ALLIED STORES CORPORATION
Schedule of Lease Rentals*
(other than with Alstores Realty Corporation)

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$5,064,000		
1962	5,064,000	3.465106	$17,547,300
1963	5,064,000		
1964	5,064,000		
1965	5,000,000	.747258	3,736,300
1966	4,971,000	.704961	3,504,400
1967	4,921,000	.665057	3,272,700
1968	4,921,000	.627412	3,087,500
1969	4,775,000	.591898	2,826,400
1970	4,627,000		
1971	4,627,000	2.050991	9,489,900
1972	4,627,000		
1973	4,627,000		
1974	4,260,000	.442301	1,884,200
1975	3,891,000		
1976	3,891,000	1.532619	5,963,400
1977	3,891,000		
1978	3,891,000		
1979	3,014,000	.330513	996,200
1980	2,136,000		
1981	2,136,000	1.145263	2,446,300
1982	2,136,000		
1983	2,136,000		
1984	1,947,000	.246979	480,900
1985	1,757,000		
1986	1,757,000	1.055806	1,855,100
1987	1,757,000		
1988	1,757,000		
1989	1,330,000	.184557	245,400
1990	901,000		
1991	901,000	.639509	576,200
1992	901,000		
1993	901,000		
1994	889,000	.137912	122,700
1995-2005	876,000	1.087691	952,800
2006-2015	688,000	.068538	47,200
Present value of lease rentals			$59,034,900

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-5
F. W. WOOLWORTH COMPANY
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$44,270,000	.943396	$41,764,100
1962	44,270,000	.889996	39,400,100
1963	42,316,000	.839619	35,529,400
1964	40,362,000		
1965	40,362,000	2.909369	117,428,000
1966	40,362,000		
1967	40,362,000		
1968	37,712,000	.627412	23,661,000
1969	35,062,000		
1970	35,062,000		
1971	35,062,000		
1972	35,062,000	3.502455	122,803,100
1973	35,062,000		
1974	35,062,000		
1975	35,062,000		
1976	11,913,000		
1977	11,913,000		
1978	11,913,000		
1979	11,913,000		
1980	11,913,000	3.071107	36,586,100
1981	11,913,000		
1982	11,913,000		
1983	11,913,000		
1984	11,913,000		
1985	11,913,000		
1986	4,626,000		
1987	4,626,000		
1988	4,626,000		
1989	4,626,000		
1990	4,626,000	1.714890	7,933,100
1991	4,626,000		
1992	4,626,000		
1993	4,626,000		
1994	4,626,000		
1995	4,626,000		
	Present value of lease rentals		$425,104,900

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-6
PEOPLES DRUG STORE
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$2,481,200	.943396	$2,340,754
1962	2,481,200	.889996	2,208,258
1963	2,203,543	.839619	1,850,137
1964	1,925,886	.792094	1,525,483
1965	1,925,886	.747258	1,439,134
1966	1,925,886	.704961	1,357,675
1967	1,925,886	.665057	1,280,824
1968	1,726,946	.627412	1,083,507
1969	1,528,006	.591898	904,423
1970	1,528,006	.558395	853,231
1971	1,528,006	.526788	804,935
1972	1,528,006	.496969	759,372
1973	1,330,628	.468839	623,850
1974	1,133,250	.442301	501,238
1975	1,133,250	.417265	472,865
1976	1,133,250	.393646	446,099
Present value of lease rentals			$18,451,785

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-7
BOND STORES, INC.
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$2,972,000	.943396	$2,803,773
1962	2,972,000	.889996	2,645,068
1963	2,972,000	.839619	2,495,348
1964	2,972,000	.792094	2,354,103
1965	2,972,000	.747258	2,220,851
1966	2,735,000	.704961	1,928,069
1967	2,539,000	.665057	1,688,580
1968	2,539,000	.627412	1,592,999
1969	2,539,000	.591898	1,502,829
1970	2,539,000	.558395	1,417,765
1971	2,120,000	.526788	1,116,791
1972	1,701,000	.496969	845,344
1973	1,701,000	.468839	797,495
1974	1,701,000	.442301	752,354
1975	1,701,000	.417265	709,768
1976	1,701,000	.393646	669,592
1977	1,701,000	.371364	631,690
1978	1,701,000	.350344	595,935
1979	402,000	.330513	132,866
1980	402,000	.311805	125,346
1981	402,000	.294155	118,250
1982	402,000	.277505	111,557
1983	402,000	.261797	105,242
1984	402,000	.246979	99,286
Present value of lease rentals			$27,460,901

*Estimated from information contained in the Form 10-K filed with the Securities and Exchange Commission. See Chapter V.

APPENDIX II-8
CONSOLIDATED FOODS CORPORATION
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$4,449,000		
1962	4,449,000	2.673012	$11,892,200
1963	4,449,000		
1964	3,942,000	.792094	3,122,400
1965	3,433,000		
1966	3,433,000	2.744688	9,422,500
1967	3,433,000		
1968	3,433,000		
1969	2,708,000	.591898	1,602,900
1970	1,981,000		
1971	1,981,000	2.040991	4,043,200
1972	1,981,000		
1973	1,981,000		
1974	1,385,000	.442301	612,600
1975	787,000		
1976	787,000	1.532619	1,206,200
1977	787,000		
1978	787,000		
1979	421,000	.330513	139,100
1980	53,000		
1981	53,000	1.392242	73,800
1982	53,000		
1983	53,000		
Present value of lease rentals			$32,114,900

*Estimated from information contained in the company's annual report. See Chapter V.

APPENDIX II-9
LOCKHEED AIRCRAFT COMPANY
Schedule of Lease Rentals*

Year	Rental Payable	Discount Factor at 6%	Discounted Value
1961	$3,700,000		
1962	3,700,000		
1963	3,700,000	4.212364	$15,585,700
1964	3,700,000		
1965	3,700,000		
1966	2,625,000	.704961	1,850,500
1967	1,550,000		
1968	1,550,000		
1969	1,550,000		
1970	1,550,000		
1971	1,550,000	5.188571	8,042,300
1972	1,550,000		
1973	1,550,000		
1974	1,550,000		
1975	1,550,000		
1976	1,550,000		
Present value of lease rentals			$25,478,500

*Estimated from information contained in the company's annual report. See Chapter V.

APPENDIX II-10
TEXTRON, INC.
Schedule of Lease Rentals*

Discounted value of leases as shown in a footnote to annual report $29,700,000.

APPENDIX II-11
MILLER MANUFACTURING COMPANY
Schedule of Lease Rentals*

One lease with an annual rental of $76,962 for 21 years. 11.764077 (discount factor) times $76,962 (annual rental) = $905,387.

APPENDIX II-12
PUROLATOR PRODUCTS, INC.
Schedule of Lease Rentals*

One lease with an annual rental of $87,640 for 17 years. 10.477260 (discount factor) times $87,640 (annual rental) = $918,227.

*Estimated from information contained in the company's annual report. See Chapter V.

APPENDIX III

FINANCIAL STATEMENTS OF 11 SELECTED COMPANIES

APPENDIX III-1
PENN FRUIT CO., INC.
and Subsidiaries
Consolidated Balance Sheet
August 26, 1961

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash on hand, in transit and demand deposits	$ 3,761,984	$ 3,761,984
United States Treasury Notes	658,966	658,966
Trade accounts receivable	75,482	75,482
Other accounts receivable	592,674	592,674
Inventories of merchandise and supplies at cost or market, whichever is lower	13,211,029	13,211,029
Prepaid Expenses	898,127	898,127
TOTAL CURRENT ASSETS	19,198,262	19,198,262
Investments and Other Assets:		
Loans secured by mortgages on leased premises	291,428	291,428
Cash surrender value of insurance	52,990	52,990
Cash balances held in sinking, purchase and conversion funds for Preferred stocks	7,753	7,753
Investments in and advances to affiliated and associated companies--at cost	3,002,970	3,002,970
TOTAL INVESTMENTS AND OTHER ASSETS	3,355,141	3,355,141
Plant and Equipment (at cost):		
Land	923,285	923,285
Buildings	1,051,141	1,051,141
Furniture and equipment	12,722,897	12,722,897
Transportation equipment	195,155	195,155
Improvements to leases premises	8,792,814	8,792,814
	23,685,292	23,685,292
Less--accumulated allowances for depr.	9,264,968	9,264,968
	14,420,324	14,420,324
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	39,734,600
TOTAL PLANT AND EQUIPMENT	14,420,324	54,154,924
Deferred Charges	422,088	422,088
TOTAL	$37,395,815	$77,130,415

*See note 1.
**See note 2.
Long-term leases and commitments: See note 4.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Accounts payable--trade	$ 4,055,733	$ 4,055,733
Current installments of long-term debt	394,266	394,266
Accrued salaries and wages	776,279	776,279
Accrued rents, expenses, etc.	808,511	808,511
Accrued taxes other than on income	785,471	785,471
Accrued State taxes payable on income	98,007	98,007
Current lease rentals	-0-	3,467,817
TOTAL CURRENT LIABILITIES	6,918,267	10,386,084
Long-Term Debt:		
Twenty-year Notes: 3-3/4%, payable in annual installments of $300,000 through Sept. 15, 1968; thereafter, $400,000 annually	4,900,000	4,900,000
Mortgages and other long-term liabilities	465,632	465,632
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	36,266,783
TOTAL LONG-TERM DEBT	5,365,632	41,632,415
Reserve for Possible Future Income Taxes	987,403	987,403
Stockholders' Equity:		
4.6% Cumulative Prior Preferred stock, par $50 Authorized and outstanding 23,560 shares	1,178,000	1,178,000
4.68% Convertible Preferred stock, par $50 Authorized and outstanding 86,969 shares	4,348,450	4,348,450
Common stock, par value $5 Authorized--2,000,000 shares Outstanding--1,695,761 shares	8,478,805	8,478,805
Paid-in capital in excess of par value	7,636,845	7,636,845
Earnings retained and invested in business	4,100,528	4,100,528
	25,742,628	25,742,628
Less--Stock held in treasury--at cost	1,618,115	1,618,115
TOTAL STOCKHOLDERS' EQUITY	24,124,513	24,124,513
TOTAL	$37,395,815	$77,130,415

SELECTED INCOME STATEMENT DATA

Net Sales	$175,839,731	$175,839,731
Net Income (after taxes)	1,503,671	1,503,671
Interest Charges	284,619	2,668,695

APPENDIX III-2
SAFEWAY STORES, INCORPORATED
and all subsidiaries consolidated
Statement of Financial Position
as of December 31, 1960

	as reported*	as adjusted**
Current Assets:		
Cash	$ 50,686,861	$ 50,686,861
Accounts and notes receivable	8,989,127	8,989,127
Merchandise inventories, at lower of cost or market	170,785,974	170,785,974
Prepaid expenses	8,389,485	8,389,485
Properties for development and sale within one year under the company's real estate program	9,100,523	9,100,523
TOTAL CURRENT ASSETS	247,951,970	247,951,970
Deduct Current Liabilities:		
Debentures payable	5,200,000	5,200,000
Accounts payable	85,390,670	85,390,670
Accrued expenses	22,756,128	22,756,128
Federal, Canadian and other income taxes	26,694,411	26,694,411
Current lease rentals	-0-	41,400,000
TOTAL CURRENT LIABILITIES	140,041,209	181,441,209
Working Capital	107,910,761	66,510,761
Notes Receivable and Miscellaneous Investments	3,211,847	3,211,847
Fixed Assets:		
Fixed assets--at cost less depreciation	190,680,324	190,680,324
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	437,663,000
Unamortized Debenture Issue Expense	411,325	411,325
WORKING CAPITAL AND OTHER ASSETS (Carried Forward)	$302,214,257	$698,477,257

*See note 1.
**See note 2.

Contingent Liabilities, Commitments, etc. Property leases in effect number 2,904, of which 2,376 contain options to cancel. Should the Company exercise these options, it could be required to purchase 1,893 properties. The minimum annual rental for 1961 under all leases (some of which contain percentage of sales clauses) is approximately $43,000,000; this amount decreases annually until the year 2008 as leases expire.

	as reported*	as adjusted**
Working Capital and Other Assets (Brought Forward)	$302,214,257	$698,477,257
Deduct:		
Debentures payable--long-term	34,931,000	34,931,000
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	396,263,000
Preferred stock of Canadian subsidiary held by public--par value	8,397,400	8,397,400
STOCKHOLDERS' EQUITY	258,885,857	258,885,857
Deduct:		
4.30% convertible preferred stock (cumulative) par value $100 per share--authorized and outstanding 16,101 shares	1,610,100	1,610,100
4% preferred stock (cumulative)--par value $100 per share--authorized 470,840 shares Outstanding 246,696 shares	24,669,600	24,669,600
COMMON STOCKHOLDERS' EQUITY	$232,606,157	$232,606,157
Consisting of:		
Common stock--par value $1.66-2/3 per share Authorized--27,000,000 shares Outstanding--12,433,290 shares	20,722,150	20,722,150
Additional paid-in capital	59,385,061	59,385,061
Net income retained in the business	152,498,946	152,498,946
COMMON STOCKHOLDERS' EQUITY	$232,606,157	$232,606,157

SELECTED INCOME STATEMENT DATA

Net Sales	$2,468,972,786	$2,468,972,786
Net Income (after taxes)	34,817,689	34,817,689
Interest Charges	1,822,213	28,081,993

APPENDIX III-3
ALLIED STORES CORPORATION
consolidated with Alstores Realty Corporation
Consolidated Statement of Financial Position
as of January 31, 1961

	as reported*	as adjusted**
Current Assets:		
Cash	$ 24,754,102	$ 25,719,295
Accounts and notes receivable--customers	69,895,044	69,895,044
Accounts and notes receivable--others	6,426,801	6,426,801
Merchandise inventories	95,607,800	95,607,800
Prepaid expenses	4,889,844	4,889,844
TOTAL CURRENT ASSETS	201,573,591	202,538,784
Deduct Current Liabilities:		
Accounts payable	28,136,570	27,413,311
Accrued expenses	10,343,374	11,018,352
Taxes, other than Federal income taxes	8,419,451	8,419,451
Federal income taxes	10,869,935	11,101,663
Long-term debt due within one year	842,733	9,280,529
Current lease rentals	-0-	5,064,000
TOTAL CURRENT LIABILITIES	58,612,063	72,297,306
Net Current Assets	142,961,528	130,241,478
Investments	22,764,698	3,489,239
Unamortized Long-Term Debt Expense	275,952	1,259,348
Fixed Assets:		
Property, Plant and Equipment	62,102,914	218,691,721
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	59,035,000
WORKING CAPITAL AND OTHER ASSETS (Carried Forward)	$228,105,092	$412,716,786

*See note 1.

**See note 5.

At January 31, 1961 the Corporation and its consolidated subsidiaries were lessees under 206 leases having terms of more than three years from that date. The rentals under these leases for the year ending January 31, 1962 amount to a minimum of $14,195,441 (of which $9,131,486 is payable to Alstores Realty Corporation and subsidiaries), plus in most cases, real estate taxes and other expenses and, in certain instances, increased amounts based on percentage of sales. The aforementioned minimum annual rental grouped by lease expiration dates is as

	as reported*	as adjusted**
Working Capital and Other Assets (Brought Forward)	$228,105,092	$412,716,786
Deduct:		
Long-term debt	39,551,319	166,755,107
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	53,971,000
STOCKHOLDERS' EQUITY	188,553,773	191,990,679
Deduct:		
Cumulative Preferred Stock, par value $100 per share:		
4% Series	18,164,700	18,164,700
4% Second Series	4,000,000	4,000,000
COMMON STOCKHOLDERS' EQUITY	$166,389,073	$169,825,979
Consisting of:		
Common stock, no par value, amount fixed at $1.00 per share	2,688,365	2,688,365
Capital surplus	53,063,366	53,063,366
Retained earnings	110,637,342	114,074,248
COMMON STOCKHOLDERS' EQUITY	$166,389,073	$169,825,979

SELECTED INCOME STATEMENT DATA

Net Sales	$680,492,329	$680,492,329
Net Income (after taxes)	11,112,839	11,112,839
Interest Charges	7,844,806	11,386,906

follows: $3,042,431 prior to 1980; $2,674,734 in 1981 - 1985; $3,058,116 in 1986 - 1990; $1,966,100 in 1991 - 2000; and $3,454,060 in 2001 - 2059.

APPENDIX III-4

ALLIED STORES CORPORATION AND ALSTORES REALTY CORPORATION

Consolidated Post-Closing Trial Balance

as of January 31, 1961

	Allied Stores Corporation	Alstores Realty Corporation	Intercompany Elimination		Consolidated Balances
			Debit	Credit	
Cash	$ 24,754,102	$ 965,193			$ 25,719,295
Accounts and notes receivable--customers	69,895,044	1,144,471		$ 1,144,471a	69,895,044
Accounts and notes receivable--others	6,426,801				6,426,801
Merchandise inventories	95,607,800				95,607,800
Prepaid expenses	4,889,844				4,889,844
Investments in other assets	3,489,239				3,489,239
Investments in Alstores Realty Corp.	5,703,315			5,703,315b	
Advances to Alstores Realty Corp.	14,160,690			14,160,690c	
Property, plant and equipment	62,102,914	157,177,353		588,546d	218,691,721
Unamortized long-term debt expense	275,952	983,396			1,259,348
TOTAL DEBITS	$287,305,701	$160,270,413			$425,979,092
Accounts payable	$ 28,136,570	421,212	$ 1,144,471a		27,413,311
Accrued expenses	10,343,374	674,978			11,018,352
Taxes, other than Federal income tax	8,419,451				8,419,451
Federal income taxes	10,869,935	231,728			11,101,663
Long-term debt due within one year	842,733	8,437,796			9,280,529
Long-term debt, due after one year	39,551,319	127,203,788			166,755,107
Preferred stock, 4% series	18,164,700				18,164,700
Preferred stock, 4% second series	4,000,000				4,000,000
Common stock, no-par value, amount fixed at $1.00 per share	2,688,365				2,688,365
Capital stock, par value $100		5,000,000	5,000,000b		
Capital surplus	53,063,366	703,315	703,315b		53,063,366
Retained earnings	110,637,342	3,436,906			114,074,248
Advances from Allied Stores Corp.		14,160,690	14,160,690c		
Excess of sales price over net carrying value of properties sold to Alstores Realty Corp.	588,546		588,546d		
TOTAL CREDITS	$287,305,701	$160,270,413	$21,597,022	$21,597,022	$425,979,092

APPENDIX III-5
F. W. WOOLWORTH COMPANY
and Consolidated Subsidiaries
Consolidated Balance Sheet
as of December 31, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 60,801,868	$ 60,801,868
Receivables	6,520,283	6,520,283
Merchandise inventories	175,196,431	175,196,431
Operating supplies and prepaid expenses	5,594,018	5,594,018
TOTAL CURRENT ASSETS	248,112,600	248,112,600
Investments:		
F. W. Woolworth & Co., Ltd., England	109,262,872	109,262,872
Mortgages, notes receivable and other securities	3,543,181	3,543,181
TOTAL INVESTMENTS	112,806,053	112,806,053
Properties--at cost:		
Land and buildings	84,684,576	84,684,576
Furniture, fixtures and equipment	207,032,787	207,032,787
	291,717,363	291,717,363
Less--Accumulated depreciation	91,424,129	91,424,129
	200,293,234	200,293,234
Building on leased ground, less amortization	35,445,250	35,445,250
Alterations to leased and owned buildings, less amortization	95,593,190	95,593,190
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	425,105,000
TOTAL PROPERTIES	331,331,674	756,436,674
Deferred Charges	649,065	649,065
Goodwill	1	1
TOTAL	$692,899,393	$1,118,004,393

*See note 1.

**See note 2.

Long-Term Leases: Minimum annual rentals for leased property, excluding rentals based on a percentage of sales and excluding payments of real estate taxes or other expenses, total approximately $44,300,000, the major portion of which relates to leases expiring subsequent to 1965.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Accounts payable	$ 17,091,430	$ 17,091,430
Accruals and sundry liabilities, including taxes withheld	47,706,546	47,706,546
Long-term debt payable within one year	2,884,614	2,884,614
Income taxes payable	4,596,442	4,596,442
Current lease rentals	-0-	44,270,000
TOTAL CURRENT LIABILITIES	72,279,032	116,549,032
Long-Term Liabilities:		
Long-term debt payable after one year	130,608,888	130,608,888
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	380,835,000
TOTAL LONG-TERM LIABILITIES	130,608,888	511,443,888
Reserves:		
For self-insurance to cover fire & flood damage risks on contents of stores in U. S.	3,765,606	3,765,606
For U. S. employees' sick benefits	300,000	300,000
For German employees' pensions	1,798,244	1,798,244
TOTAL RESERVES	5,863,850	5,863,850
Shareholders' Equity		
Capital stock--par value $10 per share: Authorized--20,000,000 shares Issued--9,750,000 shares	97,500,000	97,500,000
Earned surplus	388,294,703	388,294,703
	485,794,703	485,794,703
Deduct--Stock held in treasury, 46,394 shares, at cost less $901,634 previously charged to earned surplus	1,647,080	1,647,080
TOTAL SHAREHOLDERS' EQUITY	484,147,623	484,147,623
TOTAL	$692,899,393	$1,118,004,393

SELECTED INCOME STATEMENT DATA

Net Sales	$1,035,292,793	$1,035,292,793
Net Income (after taxes)	46,927,512	46,927,512
Interest Charges	6,306,406	31,812,706

APPENDIX III-6
PEOPLES DRUG STORES
and Subsidiary Corporations
Consolidated Balance Sheet
December 31, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 5,391,863	$ 5,391,863
Accounts receivable, less reserve for doubtful accounts	1,031,768	1,031,768
Merchandise inventories, at the lower of cost or market	12,962,727	12,962,727
Merchandise in transit, at cost	695,273	695,273
Inventory of supplies, at cost	69,730	69,730
Prepaid expenses	282,579	282,579
TOTAL CURRENT ASSETS	20,433,940	20,433,940
Other Assets	65,359	65,359
Fixed Assets, at cost or less:		
Land	533,965	533,965
Buildings on owned and leased land	3,093,510	3,093,510
Store fixtures, warehouse and office equipment	12,601,939	12,601,939
Automobiles and trucks	362,827	362,827
Improvements and alterations to leased buildings	907,982	907,982
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	18,451,785
	17,500,223	35,952,008
Less reserves for depreciation and amortization	6,172,160	6,172,160
TOTAL FIXED ASSETS	11,328,063	29,779,848
Goodwill	1	1
Deferred Charges	195,267	195,267
TOTAL	$32,022,630	$50,474,415

*See note 1.

**See note 2.

Long-term lease commitments: Minimum annual rentals totaling $2,481,200 (not including any taxes or insurance that may be payable under the terms of the leases) are payable by the Companies under leases on properties used in operations at December 31, 1960, covering periods of more than one year from December 31, 1960. . . .

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Accounts payable	$ 5,123,591	$ 5,123,591
Accrued expenses and other liabilities	1,625,864	1,625,864
Federal and state income taxes	1,246,593	1,246,593
Current lease rentals	-0-	2,481,200
TOTAL CURRENT LIABILITIES	7,996,048	10,477,248
Long-Term Debt:		
Notes payable to bank, unsecured, due after one year	-0-	-0-
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	15,970,585
TOTAL LONG-TERM DEBT	-0-	15,970,585
Miscellaneous Reserves	211,586	211,586
Long-Term Lease Commitments (Note 2)		
Shareholders' Equity:		
6½% Cumulative Preferred Stock: Authorized--75,000 shares, par value $100 None issued		
Common, par value $5: Authorized--750,000 shares Outstanding--550,000 shares	2,750,000	2,750,000
Capital surplus	5,559,838	5,559,838
Retained earnings	15,505,158	15,505,158
TOTAL SHAREHOLDERS' EQUITY	23,814,996	23,814,996
TOTAL	$32,022,630	$50,474,415

SELECTED INCOME STATEMENT DATA

Net Sales	$93,184,720	$93,184,720
Net Income (after taxes)	1,311,774	1,311,774
Interest Charges	49,679†	1,156,787

† Not shown in Annual Report, furnished directly by company.

APPENDIX III-7
BOND STORES, INCORPORATED
and Wholly-Owned Subsidiaries
Consolidated Balance Sheet
as at July 31, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 9,609,272	$ 9,609,272
Short-term state and municipal bonds--at cost, which approximates market, plus accrued interest	5,555,086	5,555,086
Accounts receivable--customers (net)	12,344,975	12,344,975
Miscellaneous accounts receivable	496,577	496,577
Merchandise inventories	21,012,967	21,012,967
TOTAL CURRENT ASSETS	49,018,877	49,018,877
Miscellaneous Other Assets	341,461	341,461
Fixed Assets:		
Land and buildings	9,505,862	9,505,862
Machinery, furniture, fixtures and equipment	7,426,696	7,426,696
Alterations, improvements and leaseholds	6,602,833	6,602,833
	23,535,391	23,535,391
Less--reserves for depreciation	10,837,409	10,837,409
	12,697,982	12,697,982
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	27,460,901
TOTAL FIXED ASSETS	12,697,982	40,158,883
Deferred Charges:		
Prepaid rent and advances to landlords	848,685	848,685
Unexpired insurance and other prepaid expenses	806,300	806,300
TOTAL DEFERRED CHARGES	1,654,985	1,654,985
TOTAL	$63,713,305	$91,174,206

*See note 1.

**See note 2.

General: As at July 31, 1960, the aggregate minimum annual rental upon real property leases, other than intercompany leases, expiring after July 31, 1963, amounts to approximately $2,972,000. Certain of these lease agreements provide for additional rentals based on sales or for payment of certain expenses, such as real estate taxes and maintenance costs.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Accounts payable	$ 1,584,020	$ 1,584,020
Deposits and due to customers	399,763	399,763
Accrued expenses and sundry liabilities	2,905,936	2,905,936
Reserve for Federal income taxes	1,515,456	1,515,456
Mortgage bonds payable--current installments	126,656	126,656
Current lease rentals	-0-	2,972,000
TOTAL CURRENT LIABILITIES	6,531,831	9,503,831
Long-Term Liabilities:		
Mortgage bonds payable by subsidiary	2,177,344	2,177,344
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	24,488,901
TOTAL LONG-TERM LIABILITIES	2,177,344	26,666,245
Capital Stock and Surplus:		
Preferred stock--par value $100 per share: Authorized--100,000 shares; Retired and cancelled--60,000 shares; Authorized but not issued--40,000 shares		
Common stock--par value $1.00 per share: Authorized--2,500,000 shares; Issued and outstanding--1,688,383 shares	1,688,383	1,688,383
Capital surplus	11,596,136	11,596,136
Earned surplus	41,719,611	41,719,611
TOTAL CAPITAL	55,004,130	55,004,130
TOTAL	$63,713,305	$91,174,206

SELECTED INCOME STATEMENT DATA

Net Sales	$85,062,632	$85,062,632
Net Income (after taxes)	2,556,696	2,556,696
Interest Charges	7,987†	1,655,641

†Not shown in Annual Report. Furnished directly by company.

APPENDIX III-8
CONSOLIDATED FOODS CORPORATION
and Subsidiaries
Consolidated Balance Sheet
June 30, 1961

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash--includes $357,877 U. S. Treasury Bills	$10,144,997	$10,144,997
Accounts and notes receivable (net)	16,608,731	16,608,731
Inventories, at lower of cost or market	54,948,069	54,948,069
Advances to growers	937,695	937,695
Properties under construction, to be sold and leased back, at cost	331,581	331,581
Prepaid insurance, taxes, and expenses	1,635,988	1,635,988
TOTAL CURRENT ASSETS	84,607,061	84,607,061
Fixed Assets:		
Land, building, machinery, and equipment, at cost less accumulated depreciation of $32,733,988	42,969,719	42,969,719
Rights to use of leased property, at discounted amount of related long-term rental obligations.	-0-	32,115,000
TOTAL FIXED ASSETS	42,969,719	75,084,719
Other Assets and Deferred Charges:		
Long term notes and contracts receivable	2,266,879	2,266,879
Cash value of life insurance	393,298	393,298
Leasehold improvements (net)	3,059,331	3,059,331
Long term debt expense (net)	25,493	25,493
Sundry noncurrent assets and deferred charges	1,110,109	1,110,109
TOTAL OTHER ASSETS AND DEFERRED CHARGES	6,855,110	6,855,110
Intangible Assets:		
Excess of purchase price of businesses acquired over net assets at dates of acquisition	5,008,374	5,008,374
Goodwill, trade-marks, and other intangibles	4	4
TOTAL INTANGIBLE ASSETS	5,008,378	5,008,378
TOTAL	$139,440,268	$171,555,268

*See note 1.

**See note 2.

Commitments and Contingent Liabilities: See note 3.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Notes payable to banks	$ 3,000,000	$ 3,000,000
Accounts payable	19,043,784	19,043,784
Long term debt payable within one year	3,677,890	3,677,890
Federal income taxes payable and accrued	5,473,001	5,473,001
Other taxes payable and accrued	3,459,341	3,459,341
Accrued salaries and wages, interest, and other expenses	2,974,514	2,974,514
Current lease rentals	-0-	4,449,000
TOTAL CURRENT LIABILITIES	37,628,530	42,077,530
Long Term Liabilities:		
Long term debt	20,566,262	20,566,262
Rental obligations under long-term leases (discounted at implicit interest rate)	-0-	27,666,000
TOTAL LONG TERM LIABILITIES	20,566,262	48,232,262
Capital Stock and Surplus:		
Common stock--$1.33-1/3 par value: Authorized--5,000,000 shares Reserved for stock options--115,858 shares Issued and outstanding--3,686,306 shares, after deducting 50,061 shares held in treasury	4,981,823	4,981,823
Paid-in surplus	46,813,921	46,813,921
Capital surplus	9,504,220	9,504,220
Earned surplus	21,966,875	21,966,875
	83,266,839	83,266,839
Deduct -- stock held in treasury, at cost	2,021,363	2,021,363
TOTAL CAPITAL STOCK AND SURPLUS	81,245,476	81,245,476
TOTAL	$139,440,268	$171,555,268

SELECTED INCOME STATEMENT DATA

Net Sales	$509,280,716	$509,280,716
Net Income (after taxes)	8,096,310	8,096,310
Interest Charges	1,599,884	3,526,784

APPENDIX III-9
TEXTRON, INC.
Consolidated Balance Sheet
December 31, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$15,099,572	$15,099,572
United States Government securities, at cost	5,083,156	5,083,156
Accounts receivable	49,142,491	49,142,491
Inventories, at lower of cost or market	83,147,913	83,147,913
Prepaid and deferred expenses	2,335,727	2,335,727
Other current assets	4,583,426	4,583,426
TOTAL CURRENT ASSETS	159,392,285	159,392,285
Investments:		
Notes receivable, due after one year	4,503,336	4,503,336
Investment in Textron Electronics, Inc., at cost, adjusted for equity in income	8,650,682	8,650,682
TOTAL INVESTMENTS	13,154,018	13,154,018
Property, Plant and Equipment:		
Land and buildings	38,254,785	38,254,785
Machinery and equipment	88,208,699	88,208,699
Other property	6,826,998	6,826,998
	133,290,482	133,290,482
Less reserves	52,126,828	52,126,828
	81,163,654	81,163,654
Rights to use of leased property, at discounted amount of related long-term rental obligations.	-0-	29,700,000
TOTAL FIXED ASSETS	81,163,654	110,863,654
Other Assets:		
Excess cost of companies acquired, less amort.	5,322,345	5,322,345
Unamortized debt discount and expenses	8,623,887	8,623,887
Other assets	4,173,163	4,173,163
TOTAL OTHER ASSETS	18,119,395	18,119,395
TOTAL	$271,829,352	$301,529,352

*See note 1.

**See note 2.

Annual rentals payable under long-term leases are approximately $4,600,000 and the aggregate rentals payable under these leases, discounted to December 31, 1960, are approximately $29,700,000. Under certain leases Textron is also required to pay for insurance, taxes and repairs.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Notes payable--banks	$14,890,000	$14,890,000
Accounts payable	17,550,207	17,550,207
Accrued Expenses and other current liabilities	22,237,586	22,237,586
Federal income taxes	3,467,360	3,467,360
Current maturities of long-term notes	3,906,038	3,906,038
Amounts payable for companies acquired	1,374,021	1,374,021
Dividends payable	1,618,383	1,618,383
Current lease rentals	-0-	4,600,000
TOTAL CURRENT LIABILITIES	65,043,595	69,643,595
Long-Term Debt:		
Note payable--The Prudential Insurance Company of America	25,000,000	25,000,000
Other notes	14,302,302	14,302,302
Debentures--subordinated to all other debt.	44,217,417	44,217,417
Amounts payable for companies acquired, due after one year.	3,150,000	3,150,000
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	25,100,000
TOTAL LONG-TERM DEBT	86,669,719	111,769,719
Other Liabilities	940,607	940,607
Capital Stock and Surplus:		
$1.25 Convertible Preferred: Outstanding--368,647 shares	9,216,175	9,216,175
Common Stock Outstanding--4,672,429 shares after deducting 313,200 shares in treasury	2,336,215	2,336,215
Capital surplus (principally paid-in)	66,444,497	66,444,497
Earned surplus	41,178,544	41,178,544
TOTAL CAPITAL STOCK AND SURPLUS	119,175,431	119,175,431
TOTAL	$271,829,352	$301,529,352

SELECTED INCOME STATEMENT DATA

Net Sales	$383,187,580	$383,187,580
Net Income (after taxes)	14,168,301	14,168,301
Interest Charges	5,112,959	6,894,959

APPENDIX III-10
MILLER MANUFACTURING CO.
and Subsidiary Companies
Consolidated Balance Sheet
September 30, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 806,162	$ 806,162
Accounts receivable (net)	1,643,678	1,643,678
Inventories, at lower of cost or market	3,369,473	3,369,473
Prepaid expenses	115,439	115,439
TOTAL CURRENT ASSETS	5,934,752	5,934,752
Other Assets:		
Cash surrender value of life insurance policies	193,880	193,880
Miscellaneous investments, deposits, and advances	88,430	88,430
TOTAL OTHER ASSETS	282,310	282,310
Property, Plant, and Equipment:		
Land	116,321	116,321
Buildings and improvements	1,557,879	1,557,879
Machinery and equipment	4,165,993	4,165,993
	5,840,193	5,840,193
Less allowances for depreciation	3,021,211	3,021,211
	2,818,982	2,818,982
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	905,387
TOTAL PROPERTY, PLANT, AND EQUIPMENT	2,818,982	3,724,369
Deferred Charges:		
Unamortized bond discount and expense	69,557	69,557
Unamortized patent licenses	20,115	20,115
TOTAL DEFERRED CHARGES	89,672	89,672
TOTAL	$9,125,716	$10,031,103

*See note 1.
**See note 2.

Lease agreement: The Company is leasing the plant in Alliance, Ohio, for twenty-one years at an annual rental of $76,962 plus taxes, repairs, and insurance. The company has an option to purchase the premises.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Note payable to bank	$ 600,000	$ 600,000
Accounts payable and accrued expenses	1,104,741	1,104,741
Customers' deposits on orders	206,015	206,015
Dividends payable in October, 1960	59,298	59,298
Sinking fund payment due August 1, 1961	205,655	205,655
Federal taxes on income	733,538	733,538
Current lease rentals	-0-	76,962
TOTAL CURRENT LIABILITIES	$2,909,247	$2,986,209
Long-Term Liabilities:		
6% Sinking fund debentures due August 1, 1973	940,845	940,845
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	828,425
TOTAL LONG-TERM LIABILITIES	940,845	1,769,270
Stockholders' Equity:		
Class "A" Stock, $5 par value; entitled upon dissolution to $10 a share; cumulative 60¢ per annum: Authorized and outstanding--5,087 shares	25,435	25,435
Common Stock, $1 par value: Authorized--750,000 shares Outstanding--585,351 shares	585,351	585,351
Instalments received under stock purchase plan	92,958	92,958
Additional paid-in capital	950,987	950,987
Accumulated net income retained	3,620,893	3,620,893
TOTAL STOCKHOLDERS' EQUITY	5,275,624	5,275,624
TOTAL	$9,125,716	$10,031,103

SELECTED INCOME STATEMENT DATA

Net Sales	$16,121,877	$16,121,877
Net Income (after taxes)	913,303	913,303
Interest Charges	136,376	190,699

APPENDIX III-11
LOCKHEED AIRCRAFT CORPORATION
Consolidated Balance Sheet
December 25, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 30,242,000	$ 30,242,000
Accounts receivable--U. S. Government	174,445,000	174,445,000
Other accounts receivable	49,735,000	49,735,000
Inventories	176,184,000	176,184,000
Prepaid expenses	15,034,000	15,034,000
TOTAL CURRENT ASSETS	$445,640,000	$445,640,000
Investments, at Cost:		
Pacific Finance Corporation (market value $15,757,000)	5,469,000	5,469,000
Other	7,490,000	7,490,000
TOTAL INVESTMENTS	12,959,000	12,959,000
Fixed Assets:		
Property, plant and equipment (net)	73,871,000	73,871,000
Rights to use of leased property, at discounted amount of related long-term rental obligations	-0-	25,479,000
	73,871,000	99,350,000
Deferred Charges	1,906,000	1,906,000
TOTAL	$534,376,000	$559,855,000

*See note 1.
**See note 2.
Rent commitments under various long-term leases require annual payments excluding property taxes and insurance of from $4,400,000 to $3,000,000 through 1971 and from $2,000,000 to $1,100,000 for the years 1972 to 1981.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Notes payable--banks	$ 70,000,000	$ 70,000,000
Accounts payable--trade	135,309,000	135,309,000
Salaries and wages	27,395,000	27,395,000
Federal income taxes and renegotiation refunds	8,203,000	8,203,000
Other taxes	10,784,000	10,784,000
Customers' advances	93,560,000	93,560,000
Retirement plan contribution	14,294,000	14,294,000
Other liabilities	28,450,000	28,450,000
Current lease rentals	-0-	3,700,000
TOTAL CURRENT LIABILITIES	387,995,000	391,695,000
Deferred Income	3,164,000	3,164,000
Long-Term Liabilities:		
4.50% Debentures--due 1976	28,125,000	28,125,000
3.75% Subordinated debentures--due 1980	11,759,000	11,759,000
Rental obligations under long-term leases (discounted at implicit interest rates)	-0-	21,779,000
TOTAL LONG-TERM LIABILITIES	39,884,000	61,663,000
Stockholders' Equity:		
Capital stock, $1 par value: Authorized--14,000,000 shares Reserved for conversion of subordinated debentures--484,508 shares Reserved for employees options--449,467 Issued	7,400,000	7,400,000
Additional capital	51,834,000	51,834,000
Earnings retained for use in business	44,099,000	44,099,000
TOTAL STOCKHOLDERS' EQUITY	103,333,000	103,333,000
TOTAL	$534,376,000	$559,855,000

SELECTED INCOME STATEMENT DATA

Net Sales	$1,332,289,000	$1,332,289,000
Net Income (after taxes)	(42,934,000)	(42,934,000)
Interest Charges	6,604,000	8,132,740

APPENDIX III-12
PUROLATOR PRODUCTS, INC.
and Subsidiaries
Statement of Consolidated Financial Condition
December 31, 1960

ASSETS

	as reported*	as adjusted**
Current Assets:		
Cash	$ 2,429,215	$ 2,429,215
Marketable securities, at cost	50,000	50,000
Receivables (net)	4,438,953	4,438,953
Inventories, at the lower of average cost or replacement market	10,118,605	10,118,605
Prepaid expenses	1,660,219	1,660,219
TOTAL CURRENT ASSETS	18,696,992	18,696,992
Investments:		
U. S. Treasury bonds, at cost, less amortiz	150,000	150,000
Affiliated companies	394,256	394,256
TOTAL INVESTMENTS	544,256	544,256
Plant and Equipment:		
Plant and equipment, at cost	10,150,127	10,150,127
Less accumulated depreciation	3,503,842	3,503,842
	6,646,285	6,646,285
Rights to use of leased property, at discounted amount of related long-term rental obligation	-0-	918,227
TOTAL PLANT AND EQUIPMENT	6,646,285	7,564,512
Patents	42,293	42,293
TOTAL	$25,929,826	$26,848,053

*See note 1.
**See note 2.
The company leases its plant in Rahway, New Jersey, from the John Hancock Mutual Life Insurance Company. The lease expires on March 14, 1978 with three renewal options of ten consecutive years each. The annual rental amounts to $87,640 or an aggregate of $1,511,790 from December 31, 1960. Pursuant to the terms of the lease, $150,000 of U. S. Treasury bonds were deposited with the lessor to be returned in part in 1961 and completely in 1964.

LIABILITIES AND SHAREHOLDERS' EQUITY

	as reported*	as adjusted**
Current Liabilities:		
Mortgage note payable	$ 18,833	$ 18,833
Serial note payable	300,000	300,000
Trade accounts payable	2,419,331	2,419,331
Other accounts payable	335,017	335,017
Accrued salaries, wages and vacations	421,998	421,998
Accrued taxes, other than on income	208,607	208,607
Miscellaneous accrued expenses	639,462	639,462
Taxes on income, estimated	1,158,919	1,158,919
Current lease rentals	-0-	87,640
TOTAL CURRENT LIABILITIES	5,502,167	5,589,807
Long-Term Debt:		
Serial note payable	5,550,000	5,550,000
Mortgage payable	122,182	122,182
Rental obligations under long-term leases (discounted at implicit interest rate)	-0-	830,587
TOTAL LONG-TERM DEBT	5,672,182	6,502,769
Stockholders' Equity:		
Common stock, $1.00 par value per share Authorized--2,000,000 shares Outstanding--659,149 shares	659,149	659,149
Paid-in capital--excess of market value over par value of stock issued	8,717,764	8,717,764
Paid-in capital--excess of recorded value of net assets acquired over market value of stock issued	735,426	735,426
Retained earnings	4,643,138	4,643,138
TOTAL STOCKHOLDERS' EQUITY	14,755,477	14,755,477
TOTAL	$25,929,826	$26,848,053

SELECTED INCOME STATEMENT DATA

Net Sales	$48,349,971	$48,349,971
Net Income (after taxes)	1,918,202	1,918,202
Interest Charges	288,053	343,149

APPENDIX III-13

NOTES TO FINANCIAL STATEMENTS

Note 1: The figures shown in the "as reported" column are those reported in the company's annual report for the year indicated. All footnotes to the financial statements have been omitted except those relating to leases. These footnotes have been numbered in the same manner as they appeared in the annual reports and are reproduced on the bottom of the first page of the balance sheets presented herein.

Note 2: The figure shown in the "as adjusted" column are the same as the "as reported" figures except that they have been adjusted to reflect the capitalization of leases. The following accounts have been adjusted:

(a) The account "rights to use of leased property, at discounted amount of related long-term rental obligations" has been included in the "fixed asset" section. The computation of the amounts included under this heading are shown in Appendix II and are described in Chapter V.

(b) The "current lease rentals" (rentals payable under long-term lease agreements within one year of the balance sheet date) have been included in the "current liabilities" section.

(c) The "rental obligations under long-term leases (discounted at implicit interest rates)" (other than the rentals due within one year) have been included in the "long-term liabilities" section.

(d) "Interest" includes 6% of the amount shown under "rights to use of leased property, at discounted amount of related long-term rental obligations," the amount of "financing" during the period.

Note 3: Consolidated Foods Corporation's note 8 to the financial statements reads as follows:

> A number of properties are occupied by the Corporation and subsidiaries under long-term leases. Minimum annual rentals on such leases having an original life of more than five years average approximately $4,309,000 annually for years ending 1962-66, $3,348,000 in 1967-71, $1,940,000 in 1972-76, $787,000 in 1977-81, and $53,000 in 1982-86. Subsidiaries of the Corporation have guaranteed long-term leases with minimum annual rentals averaging approximately $140,000 annually through 1966, $85,000 from 1967 through 1971, and $41,000 from 1972 through 1977. . . .

Note 4: Penn Fruit Company's note 5 to the financial statements reads as follows:

> The Company had 105 leases on properties in use expiring more than three years after August 26, 1961. Such leases call for minimum aggregate annual rentals totaling $3,769,153, of which about 24% relate to leases expiring within 15 years and the remainder relate to leases expiring from 15 to 31 years, with the exception of one lease expiring in 95 years.
>
> The Company had entered into additional long-term leases covering 11 proposed supermarkets which provide for estimated minimum aggregate annual rentals of $415,000, the rentals to commence at the various dates of completion.
>
> The sum of $58,339 in aggregate rent on leases of transportation equipment is payable in quarterly installments of varying amounts through January 26, 1964. The leases contain options to purchase the equipment at prices declining in proportion to rentals paid.
>
> The sum of $441,284 in aggregate rent on leases of automatic sprinklers is payable monthly in annual rentals of $151,320 at various dates extending through August 14, 1967. The leases are subject to renewal at the option of the Company at nominal rentals. . . .

Only the 105 leases mentioned in the first paragraph of the above note were capitalized. It was assumed that the leases on transportation equipment and automatic sprinklers were service leases rather than financial leases and therefore would not be subject to capitalization.

Note 5: The "as adjusted" column for Allied Stores Corporation was computed in a different manner from that of the other ten companies because many of Allied's leases are from a wholly-owned subsidiary, Alstores Realty Corporation. The latter company was not consolidated with other subsidiaries of Allied Stores Corporation in the published annual report. Instead, separate financial statements were included in the parent company's annual report.

Because the purpose of capitalization is to place the assets and liabilities on the books at cost, it was deemed advisable to consolidate the balance sheets of the Allied Stores Corporation and the Alstores Realty Corporation (see Appendix III-4). This procedure eliminated the need for estimating the cost of assets leased from the subsidiary and the amount of the related lease liability. For purposes of comparison the

lease liability was also estimated by capitalization. The amount of the liability arising from the assets leased from Alstores Realty Corporation as determined by capitalization was $126,869,000 compared to the actual figure of $135,641,584 as shown on the company's balance sheet. This confirms the statement made in Chapter V that the six per cent implied interest rate used in the calculations was conservative in that it underestimated the amount of the lease liability.

The leases which Allied Stores Corporation had with outside concerns (other than with Alstores Realty Corporation) were capitalized in the same manner as were the leases for the other firms (see Appendix II-3). These figures were combined with the consolidated balance sheet of Allied Stores Corporation and Alstores Realty Corporation (see Appendix III-4), to produce the amounts shown in the "as adjusted" column for Allied Stores Corporation.

APPENDIX IV
Chapter 14 of Bulletin 43
Disclosure of Long-Term Leases in
Financial Statements of Lessees

CHAPTER 14

Disclosure of Long-Term Leases in Financial Statements of Lessees

1. THE GROWTH IN RECENT YEARS of the practice of using long-term leases as a method of financing has created problems of disclosure in financial statements. In buy-build-sell-and-lease transactions, the purchaser of land builds to his own specifications, sells the improved property, and simultaneously leases the property for a period of years. Similar transactions are the sale and lease of existing properties or the lease of properties to be constructed by the lessor to the specifications of the lessee. The lessee ordinarily assumes all the expenses and obligations of ownership (such as taxes, insurance, interest, maintenance, and repairs) except payment of any mortgage indebtedness on the property.

2. There are many variations in such types of transactions. For example, some leases contain an *option* for acquisition of the property by the lessee, while other leases contain a *requirement* that the lessee purchase the property upon expiration of the lease. In some the price to be paid upon repurchase is related to the fair value of the property or the depreciated book value; in others it is an arbitrary amount with little or no relation to the property's worth, or a nominal sum. Some leases provide for a high initial rental with declining payments thereafter or renewal at substantially reduced rentals.

3. Where long-term leases are used as a substitute for ownership and mortgage borrowing a question arises as to the extent of disclosure to be made in financial statements of the fixed annual amounts payable and other important terms under such leases.[1]

4. Although the types of sell-and-lease arrangements referred to in paragraph 1 differ in many respects from the conventional long-term

[1]Rule 3-18 (b) of Regulation S-X issued by the Securities and Exchange Commission reads: "Where the rentals or obligations under long-term leases are material there shall be shown the amounts of annual rentals under such leases with some indication of the periods for which they are payable, together with any important obligation assumed or guarantee made in connection therewith. If the rentals are conditional, state the minimum annual amounts."

lease,[2] the principles of disclosure stated herein are intended to apply to both. This chapter does not apply to short-term leases[3] or to those customarily used for oil and gas properties.

5. The committee believes that material amounts of fixed rental and other liabilities maturing in future years under long-term leases and possible related contingencies are material facts affecting judgments based on the financial statements of a corporation, and that those who rely upon financial statements are entitled to know of the existence of such leases and the extent of the obligations thereunder, irrespective of whether the leases are considered to be advantageous or otherwise. Accordingly, where the rentals or other obligations under long-term leases are material in the circumstances, the committee is of the opinion that:

(a) disclosure should be made in financial statements or in notes thereto of:

(1) the amounts of annual rentals to be paid under such leases with some indication of the periods for which they are payable and

(2) any other important obligation assumed or guarantee made in connection therewith;

(b) the above information should be given not only in the year in which the transaction originates but also as long thereafter as the amounts involved are material; and

(c) in addition, in the year in which the transaction originates, there should be disclosure of the principal details of any important sale-and-lease transaction.

6. A lease arrangement is sometimes, in substance, no more than an instalment purchase of the property. This may well be the case when the lease is made subject to purchase of the property for a nominal sum or for an amount obviously much less than the prospective fair value of the property; or when the agreement stipulates that the rental payments may be applied in part as instalments on the purchase price; or when the rentals obviously are so out of line with rentals for similar properties as to negative the representation that the rental payments are for current use of the property and to create the presumption that portions of such rentals are partial payments under a purchase plan.

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[2]The conventional lease, a straight tenure contract between the owner of property and a lessee, generally does not involve buying, building, and selling of property by the lessee, or special repurchase arrangements.

[3]Three years has been used as a criterion in some cases for classifying le short-term or long-term.

7. Since the lessee in such cases does not have legal title to the property and does not necessarily assume any direct mortgage obligation, it has been argued that any balance sheet which included the property among the assets and any related indebtedness among the liabilities would be incorrect. However, the committee is of the opinion that the facts relating to all such leases should be carefully considered and that, where it is clearly evident that the transaction involved is in substance a purchase, the "leased" property should be included among the assets of the lessee with suitable accounting for the corresponding liabilities and for the related charges in the income statement.

One member of the committee, Mr. Lindquist, assented with qualification to adoption of chapter 14.

Mr. Lindquist's qualification relates to paragraph 6. He believes that at any time during a long-term lease, other than a reasonable period before its expiration, no determination is possible as to *prospective fair value of the property* for comparison with the purchase price that may be stated in the lease. He also questions the ability of an accountant to carry out the implicit requirement for comparison of the lease rental with *rentals for similar properties* in view of the many physical and other factors on which would rest a conclusion of similarity of properties.

APPENDIX V

Debt and Lease Restrictions in Credit Agreements of Major Airlines as of July 1, 1959

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
American Metropolitan and Prudential Ins. Cos. Nov. 1, 1955 and Sept. 1, 1956	No new debt unless "Net Depreciated Assets" (Total assets net of depreciation, intangibles such as franchises and organization expenses, and all "Current Indebtedness") is at least equal to 175% of "Funded Indebtedness" (excluding Subordinated Debt due after one year). Net Depreciated Assets shall not at any time be less than 150% of Funded Indebtedness.	New leases of flight equipment shall not be entered into unless annual rentals on all such leases (excluding "Excepted Leases") shall be less than 5% of total operating expenses (including depreciation) for the next twelve calender months.
Braniff Seven Insurance Companies. Indenture or mortgage DTD July 1, 1956 contains the restrictions	"Asset Ratio" shall not be less than 100% at any time. Numerator is "Net Fundable Assets" defined as 60% of the depreciated value of flight equipment plus 100% of other tangible assets, less current liabilities. Denominator is the sum of Funded Debt plus 100% of the rental obligations for flight equipment (other than Excepted Leases) plus the following percentages of contractual obligations for the acquisition of new assets: flight equipment, 25%; other operating property, 60%; non-operating property, 100%.	Aggregate annual payments on real estate leases may not exceed $1,000,000. Flight equipment leases (other than Excepted Leases) are permitted "to meet additional seasonal traffic demands," but the term of the lease shall not exceed 12 months.
Capital Vickers Armstrong, Ltd. Chattel Mortgage DTD Mar. 1, 1955. Fifth Amendment DTD July 15, 1958.	No new debt permitted without approval of lender except (1) $12,000,000 of debentures, (2) purchase money mortgages connected with the purchase of new aircraft, (3) bank loans, not to exceed $1,000,000 after Aug. 31, 1958, and (4) $750,000 of conditional sales contracts for the acquisition of ground equipment.	No new leases of any property without approval of lenders, except aircraft required by Capital to operate over any new routes granted to the company after the date of this agreement may be leased for a period not to exceed three years.

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
Continental Chase Manhatten Bank April 10, 1957. Amended on March 12, 1959.	New debt prohibited except $150,000 for real estate in Denver and $2,250,000 for a maintenance facility in Los Angeles. Maintenance restrictions accomplished by Net Worth requirements ($24,000,000, including subordinated debt and excluding unamortized discounts on debt and capital stock) and Working Capital requirements (the greater of 20% of annual operating expenses excluding depreciation or ($4,500,000. Bank not required to make all of agreed loan if aggregate principal would then exceed 133 1/3% of Net Worth (defined as above). Aggregate principal shall not exceed 75% of the depreciated cost of the mortgaged flight equipment plus 90% of deposits on new equipment.	Aircraft leases (other than Excepted (Leases) in addition to ten DC-3's already under lease are prohibited except for not more than two planes for terms of three months or less. Aggregate annual rentals on property other than aircraft leased for terms exceeding one year may not exceed $1,050,000. Section 8L reads as follows: "No agreement by the Company, whether in the form of a lease or otherwise, pursuant to which the Company may acquire title to fixed assets other than flight equipment for a nominal consideration at or prior to the expiration of such agreement shall be deemed to be a lease for the purposes of this Section 8L."
Delta Four Insurance Companies. Nov. 17, 1959. 25 Banks Mar. 15, 1956. Second Amendment Dec. 10, 1958.	No new debt unless aggregate funded and current debt is less than: (1) 60% of Excess Working Capital (defined as current assets less the greater of (a) 125% of current liabilities or (b) current liabilities plus $3,500,000 prior to Jan. 1, 1961 and $5,000,000 thereafter. Current liabilities do not include current payments on debt.) plus 60% of investment in flight equipment (including deposits); or (2) 100% of Equity (capital stock and surplus plus subordinated debt not to exceed 50% thereof).	Engines and propellors on turbine power plants may be leased, but the value thereof shall be added to funded debt and to investment in flight equipment for purposes of applying the debt restrictions. Old flight equipment may be sold and leased back for a period not to exceed one year beyond the expected delivery date of new equipment which replaces it. Other than the above, the Excepted Leases, no flight equipment leases are permitted for a term of more than one year. Total lease payments (excluding landing fees) on all real and personal property

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
Delta - Continued	After Dec. 31, 1960, aggregate funded and current debt, less the amount of Excess Working Capital, shall not exceed the lesser of (1) 75% of investment in flight equipment (including deposits), or (2) 150% of Equity.	may not exceed 4% of total operating revenue for the company in the preceding fiscal year.
Eastern Equitable Life Assurance Society Oct. 31, 1955, Amended in Dec. 1957 and Oct. 1958. 18 Banks Oct. 10, 1958	New unsecured debt in excess of $10,000,000 requires approval of lenders. Funded debt at no time shall exceed: (1) book value of flight equipment plus deposits on new equipment, or (2) 125% of the sum of capital stock and surplus (less any treasury stock) plus the "Provision for Overhaul of Flight Equipment."	Aggregate annual payments on aircraft leases with a term of more than two years shall not exceed $5,000,000 (excluding Excepted Leases). Aggregate annual payments on leases of hangers and other facilities with a term of more than three years shall not exceed $7,500,000.
National First National City Bank and Chemical Corn Exchange Bank, Dec. 3, 1958.	Short-term debt limited to $2,000,000, but may rise to $8,000,000 between Jan. 1, 1960 and June 30, 1961. Funded and short-term debt may not exceed 150% of tangible net worth, except during the 18-month period above the ratio may be 170%. Tangible net worth is the excess of tangible assets plus prospective profits on firm sales of flight equipment plus prospective proceeds of firm equity underwriting agreements less all liabilities except subordinated debt. Funded and short-term debt may not exceed the sum of 85% of depreciated value of flight equipment plus deposits on new equipment plus working capital in excess of	Lease of flight equipment from Pan American permitted. No other flight equipment leases permitted, except Excepted Leases. Conditional sales or other title retention agreements in excess of $1,000,000 are prohibited. "The term 'title retention agreement' as used herein shall include... any agreement for the use of property of others or lease of property by the Company where the rental or other payments are calculated to amortize substantially all of the cost of the property (except for estimated salvage value) over the term of the agreement or lease."

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
National - Continued	$2,500,000 plus the unused commitment of this loan until Jan. 1, 1961. Working capital determination excludes current portion of long-term debt and, during the 18-month period, short-term debt.	
Northeast Five Banks, Sept. 30, 1955. Amended July 15, 1958. Equipment Trust Agreement with Vickers-Armstrong and Rolls-Royce DTD July 15, 1958.	Sale of new equity or subordinated debt was a condition precedent to the bank loan. After Dec. 31, 1958, net worth (tangible assets plus $1,000,000 of route extension and development expenses less all liabilities except subordinated debt) must exceed 125% of funded debt. New debt prohibited without approval of lenders.	Lease of aircraft (other than Excepted Leases) may not exceed five airplanes at any one time for terms of four months or less.
Northwest 15 Banks, DTD. Nov. 28, 1958 12 Insurance Companies Nov. 28, 1958	New debt may not be incurred unless the ratio of net tangible assets (tangible assets less (a) current liabilities not including current maturities of funded debt, and (b) deferred income tax credits) is at least 175% of funded debt prior to Jan. 1, 1962 and at least 200% thereafter. New debt may not be incurred if the total of funded debt shall then exceed 65% of the depreciated value of the company's investment in flight equipment (including deposits on new equipment). Funded debt may not exceed 150% of Net Worth (defined as tangible assets less all liabilities except deferred income taxes) prior to June 30, 1961, and may not exceed 125% of Net Worth after that date.	Payments on aircraft leases may not exceed $4,000,000 per year nor the term exceed more than two years. (Insurance agreement is less restrictive, but also specifically prohibits leasing of jet engines except as part of an aircraft.) Annual lease payments for all other real and personal property shall not exceed 3 1/2% of the gross operating expenses of the company for the preceding year.

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
Northwest - Continued	Funded debt may not exceed 80% of the net investment in flight equipment prior to Oct. 1, 1963, nor 75% after that date. Net tangible assets must be at least 167% of funded debt prior to Oct. 1, 1963, and at least 150% thereafter.	
Pan American 12 Insurance Companies Dec. 19, 1956. 39 Banks, Oct. 31, 1958	Asset Ratio cannot be less than 100% except during period from Jan. 1, 1959 to Dec. 31, 1960 when a 90% ratio is permitted. Numerator is Fundable Assets, defined as Excess Current Assets (Current Assets less 180% of Current liabilities, excluding current debt and unearned transportation revenue) plus 75% of the book value of flight equipment, including deposits, plus 25% of the book value of other fixed assets, plus reserves for self-insurance. Denominator is Restricted Indebtedness, defined as current and funded debt plus unearned transportation revenue, plus 25% of contractual obligations due during next six months, plus 25% of aggregate unpaid rentals (commuted to present value on the basis of 3 3/4% per annum). Bank agreement also states that current and funded debt may not at any time exceed 150% of Net Worth.	Unpaid Rentals (the minimum contractual amount payable during the remaining term of the lease) on aircraft are to be commuted to present value at 3 3/4% per annum. 25% of aggregate Unpaid Rentals (other than Excepted Leases) may not exceed 10% of Fundable Assets, as defined at the left. Bank agreement restricts lease payments on aircraft (other than Excepted Leases) to not more than $6,000,000 annually.
Trans-World Equitable Life Assurance Society Indenture of Mortgage DTD Dec. 1, 1956	New debt prohibited without approval of lender except for $35,000,000 bank credit (on condition of a major sale of equity) and 60% purchase money mortgages on new equipment, not to exceed $50,000,000 in principal amount.	Flight equipment leases (other than Excepted Leases) may not be longer than three years nor involve aggregate annual payments in excess of $1,000,000. Annual obligation on any individual real

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
Trans-World - Continued Amended in 1957, Two Bank Agreements DTD May 15, 1957 and Dec. 27, 1957.		estate facility (hanger, terminal, etc.) may not exceed $500,000. Principal amount of property other than flight equipment which may be required under "title retention agreements" is limited to $1,000,000.
United Several Insurance Companies, Original Indenture DTD Feb. 1 1947, Amended in 1952 1954, 1955, 1956 and on Mar. 1, 1957. 37 Banks Dec. 20, 1957	New Funded Debt or Contractual Obligations may not be incurred if Asset Ratio would drop below 105%. Asset Ratio must be maintained above 100%. Numerator of the ratio is Fundable Assets, defined as the sum of 100% of Cash and Marketable Securities, 90% of Receivables, 75% of net Flight Equipment including deposits on new acquisitions, 50% of Inventories including deposits, 40% of net Other Property and Equipment including deposits, and 100% of Unencumbered Special Funds, less 100% of Current Liabilities. Denominator is Funded Debt plus 10% of Contractual Obligations for Flight Equipment plus 25% of obligations for Other Operating Property plus 100% of obligations for non-operating property. New debt not permitted if aggregate would exceed 175% of net worth prior to Dec. 31, 1962 or 150% of net worth thereafter. New debt may not exceed the "borrowing base" determined as the sum of 60% of book value of DC-7's, 80% of book value of jet aircraft, 75% of book value of all other flight equipment, 100% of advance payments, 100% of all	Aircraft leases (other than Excepted leases) with a term longer than one year may not involve aggregate annual rentals in excess of $2,000,000.

Continued

APPENDIX V - Continued

Airline, Lenders, and Date of Agreement	Debt Restrictions	Lease Restrictions
United - Continued	working capital in excess of $2,500,000, and the lesser of $50,000,000 or 50% of the book value of all other assets of the company.	
Western Bank of America and Prudential Ins. Co. DTD, May 29, 1956. Same two lenders plus Occidental Life Ins. Co. DTD June 24, 1957. Indenture for Public Issue of Subordinated Debentures, DTD May 1956.	New Funded Debt may not be issued without the approval of the lenders unless after its issuance the total of Funded Debt (excluding subordinated) plus current maturities on debt plus unearned transportation revenue is less than 60% of the company's investment in flight equipment (net of depreciation but including deposits on new equipment) plus or minus the excess or deficiency of current assets to 180% of current liabilities. For this purpose, current liabilities do not include current maturities on debt or unearned transportation revenue. The debenture indenture states that additional debt is prohibited unless tangible assets less current liabilities are at least equal to 175% of the Funded Debt.	Flight equipment leases for a term of more than two years are prohibited. Rental payments on real property in any year (excluding landing fees) may not exceed 1 3/4% of the highest annual operating revenue of the company. Total rental payments in any year for landing fees, real property, and equipment rentals (other than flight equipment and up to $13,286 per month for an electronic reservations system) may not exceed 3 1/2% of the highest annual operating revenues of the company.

Source: All of the credit agreements cited above (except the agreements for Northwest, excerpts of which were provided by the airline) have been filed by the airlines with the Securities and Exchange Commission in Washington, D. C. In most cases the agreements are filed on Form 8-K, Current Report, in the month in which the agreement was executed. Some of the above data have been taken from secondary sources prepared by the airlines (such as a prospectus for a public security offering) which provide accurate lay interpretations of the agreements. The covenants described above, in most cases, represent this author's interpretation, and readers wishing a more precise statement of the terms are referred to the original documents.

This schedule was taken from: Richard Franklin Vancil, "Lease Financing of Airline Equipment," unpublished D.B.A. dissertation, Graduate School of Business Administration, Harvard University, 1960. Reproduced by permission of the author.

APPENDIX VI

LEASE

THIS LEASE, made this.....day of....., 19....., by and between a California corporation, hereinafter called "lessor," and

hereinafter called "lessee",

WITNESSETH:

For and in consideration of the mutual covenants and promises hereinafter set forth, the parties hereto agree as follows:

1. Lease. Lessor hereby leases to lessee, and lessee hereby leases and hires from lessor, all machinery, equipment and other property described in (a) the schedule executed by the parties concurrently herewith or hereafter and made a part hereof, and (b) any schedule or schedules hereafter executed by the parties hereto and made a part hereof. All said machinery, equipment and other property described in all said schedules is hereinafter collectively called "equipment"; and all said schedules are hereinafter collectively called "schedule".

2. Term. The term of this lease respecting each item of equipment commences upon whichever of the following dates is earlier:

(a) The date lessor confirms to the seller of said item of equipment the lessee's purchase order for said item or;

(b) The date said item of equipment is delivered to lessee.

The term of this lease ends on the date designated in the schedule.

3. Rent. The rent for any and every item of equipment described in the schedule shall be the amount designated in the schedule. Lessee shall pay lessor said rent in advance, in the amounts and at the times set forth in the schedule, at the office of lessor, 580 California Street, San Francisco, California, or to such other person and/or at such other place as lessor may from time to time designate in writing.

4. Use. Lessee shall use the equipment in a careful and proper manner and shall comply with and conform to all national, state, municipal, police and other laws, ordinances and regulations in anywise relating to the possession, use or maintenance of the equipment. If at any time during the term hereof lessor supplies lessee with labels, plates or other markings, stating that the equipment is owned by lessor, lessee shall affix and keep the same upon a prominent place on the equipment.

5. Lessee's Inspection; Conclusive Presumptions. Lessee shall inspect the equipment within forty-eight (48) hours after receipt thereof. Unless lessee within said period of time gives written notice to lessor, specifying any defect in or other proper objection to the equipment, lessee agrees that it shall be conclusively presumed, as between lessor and lessee, that lessee has fully inspected and acknowledged that the equipment is in good condition and repair, and that lessee is satisfied with and has accepted the equipment in such good condition and repair.

6. Lessor's Inspection. Lessor shall at any and all times during business hours have the right to enter into and upon the premises where the equipment may be located for the purpose of inspecting the same or observing its use. Lessee shall give lessor immediate notice of any attachment or other judicial process affecting any item of equipment and shall, whenever requested by lessor, advise lessor of the exact location of the equipment.

7. Alterations. Without the prior written consent of lessor, lessee shall not make any alterations, additions or improvements to the equipment. All additions and improvements of whatsoever kind or nature made to the equipment shall belong to and become the property of lessor upon the expiration, or earlier termination, of this lease.

8. Repairs. Lessee, at its own cost and expense, shall keep the equipment in good repair, condition and working order and shall furnish any and all parts, mechanisms and devices required to keep the equipment in good mechanical and working order.

9. Loss and Damage; Stipulated Loss Value. Lessee hereby assumes and shall bear the entire risk of loss and damage to the equipment from any and every cause whatsoever. No loss or damage to the equipment or any part thereof shall impair any obligation of lessee under this lease which shall continue in full force and effect.

In the event of loss or damage of any kind whatever to any item of equipment, lessee at the option of lessor shall:

(a) Place the same in good repair, condition and working order; or

(b) Replace the same with like equipment in good repair, condition and working order; or, if same is determined by lessor to be lost, stolen, destroyed or damaged beyond repair, lessee shall:

(c) Pay lessor therefor in cash the "Stipulated Loss Value" as set forth in the schedule. Upon such payment this lease shall terminate with respect to such item of equipment so paid for and lessee thereupon shall become entitled to such item of equipment as-is-where-is without warranty, express or implied, with respect to any matter whatsoever.

10. Surrender. Upon the expiration or earlier termination of this lease, with respect to any item of equipment, lessee shall (unless lessee has paid lessor in cash the "Stipulated Loss Value" of such item of equipment pursuant to paragraph 9 hereof) return the same to lessor in good repair, condition and working order, ordinary wear and tear resulting from proper use thereof alone excepted, in the following manner as may be specified by lessor:

(a) By delivering such item of equipment at lessee's cost and expense to such place as lessor shall specify within the city or county in which the same was delivered to lessee or to which same was moved with the written consent of lessor; or

(b) By loading such item of equipment at lessee's cost and expense on board such carrier as lessor shall specify and shipping the same, freight collect, to the destination designated by lessor.

11. Insurance. Lessee shall keep the equipment insured against all risks of loss or damage from every cause whatsoever for not less than the full replacement value thereof as determined by lessor; and shall carry public liability and property damage insurance covering the equipment. All said insurance shall be in form and amount and with companies approved by lessor, and shall be in the joint names of lessor and lessee. Lessee shall pay the premiums therefor and deliver said policies, or duplicates thereof, to lessor. Each insurer shall agree, by endorsement upon the policy or policies issued by it or by independent instrument furnished to lessor, that it will give lessor thirty (30) days written notice before the policy in question shall be altered or cancelled. The proceeds of such insurance, at the option of lessor, shall be applied (a) toward the replacement, restoration or repair of the equipment or (b) toward payment of the obligations of lessee hereunder. Lessee hereby appoints lessor as lessee's attorney-in-fact to make claim for, receive payment of, and execute and endorse all documents, checks or drafts for, loss or damage under any said insurance policy.

12. Taxes. Lessee shall keep the equipment free and clear of all levies, liens and encumbrances and shall pay all license fees, registration fees, assessments, charges and taxes (municipal, state and federal) which may now or hereafter be imposed upon the ownership, leasing, renting, sale, possession or use of the equipment, excluding, however, all taxes on or measured by lessor's income.

13. Lessor's Payment. In case of failure of lessee to procure or maintain said insurance or to pay said fees, assessments, charges and taxes, all as hereinbefore specified, lessor shall have the right, but shall not be obligated, to effect such insurance, or pay said fees, assessments, charges and taxes, as the case may be. In that event, the cost thereof shall be repayable to lessor with the next installment of rent, and failure to repay the same shall carry with it the same consequence, including interest at seven per cent (7%) per annum, as failure to pay any installment of rent.

14. Warranties. Lessor makes no warranties, either express or implied, as to any matter whatsoever, including, without limitation, the condition of the equipment, its merchantability or its fitness for any particular purpose.

15. Indemnity. Lessee shall indemnify lessor against, and hold lessor harmless from, any and all claims, actions, suits, proceedings, costs, expenses, damages and liabilities, including attorney's fees, arising out of, connected with, or resulting from the equipment, including without limitation the manufacture, selection, delivery, possession, use, operation or return of the equipment.

16. Security. As security for the prompt and full payment of the rent, and the faithful and timely performance of all provisions of this lease, and any extension or renewal thereof, on its part to be performed, lessee has pledged and deposited with lessor the amount set forth in the schedule. In the event any default shall be made in the performance of any of the covenants on the part of lessee herein contained with respect to any item or items of equipment lessor shall have the right, but shall not be obligated, to apply said security to the curing of such default. Any such application by lessor shall not be a defense to any action by lessor arising out of said default; and, upon demand, lessee shall restore said security to the full amount set forth in the schedule. Upon the expiration, or earlier termination, of this lease, or any extension or renewal thereof, provided lessee has paid all of the rent herein called for and fully performed all of the other provisions of this lease on its part to be performed, lessor will return to lessee any then remaining balance of said security.

17. Default. If lessee with regard to any item or items of equipment fails to pay any rent or other amount herein provided within ten (10) days after the same is due and payable, or if lessee with regard to any item or items of equipment fails to observe, keep or perform any other provision of this lease required to be observed, kept or performed by lessee, lessor shall have the right to exercise any one or more of the following remedies:

(a) To declare the entire amount of rent hereunder immediately due and payable as to any or all items of equipment, without notice or demand to lessee.

(b) To sue for and recover all rents, and other payments, then accrued or thereafter accruing, with respect to any or all items of equipment.

(c) To take possession of any or all items of equipment, without demand or notice, wherever same may be located, without any court order or other process of law. Lessee hereby waives any and all damages occasioned by such taking of possession. Any said taking of possession shall not constitute a termination of this lease as to any or all items of equipment unless lessor expressly so notifies lessee in writing.

(d) To terminate this lease as to any or all items of equipment.

(e) To pursue any other remedy at law or in equity.

Notwithstanding any said repossession, or any other action which lessor may take, lessee shall be and remain liable for the full performance of all obligations on the part of lessee to be performed under this lease.

All such remedies are cumulative, and may be exercised concurrently or separately.

18. Bankruptcy. Neither this lease nor any interest therein is assignable or transferable by operation of law. If any proceeding under the Bankruptcy Act, as amended, is commenced by or against the lessee, or if the lessee is adjudged insolvent, or if the lessee makes any assignment for the benefit of his creditors, or if a writ of attachment or execution is levied on any item or items of the equipment and is not released or satisfied within ten (10) days thereafter, or if a receiver is appointed in any proceeding or action to which the lessee is a party with authority to take possession or control of any item or items of the equipment, lessor shall have and may exercise any one or more of the remedies set forth in paragraph 17 hereof; and this lease shall, at the option of lessor, without notice, immediately terminate and shall not be treated as an asset of lessee after the exercise of said option.

19. Concurrent Remedies. No right or remedy herein conferred upon or reserved to lessor is exclusive of any other right or remedy herein or by law or equity provided or permitted; but each shall be cumulative of every other right or remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise, and may be enforced concurrently therewith or from time to time.

20. Lessor's Expenses. Lessee shall pay lessor all costs and expenses, including attorneys' fees, incurred by lessor in exercising any of its rights or remedies hereunder or enforcing any of the terms, conditions, or provisions hereof.

21. Assignment. Without the prior written consent of lessor, lessee shall not (a) assign, transfer, pledge or hypothecate this lease, the equipment or any part thereof, or any interest therein or (b) sublet or lend the equipment or any part thereof, or permit the equipment or any part thereof to be used by anyone other than lessee or lessee's employees. Consent to any of the foregoing prohibited acts applies only in the given instance; and is not a consent to any subsequent like act by lessee or any other person.

Subject always to the foregoing, this lease inures to the benefit of, and is binding upon, the heirs, legatees, personal representatives, successors and assigns of the parties hereto.

22. Lessor's Assignment. It is understood that lessor contemplates assigning this lease and/or mortgaging the equipment, and that said assignee may assign the same. All rights of lessor hereunder may be assigned, pledged, mortgaged, transferred, or otherwise disposed of, either in whole or in part, without notice to lessee. If lessor assigns this lease or the rentals due or to become due hereunder or any other interest herein, whether as security for any of its indebtedness or otherwise, no breach or default by lessor hereunder or pursuant to any other agreement between lessor or lessee, should there be one, shall excuse performance by lessee of any provision hereof. No such assignee shall be obligated to perform any duty, covenant or condition required to be performed by lessor under the terms of this lease.

23. Ownership. The equipment is, and shall at all times be and remain, the sole and exclusive property of lessor; and the lessee shall have no right, title or interest therein or thereto except as expressly set forth in this lease.

24. Personal Property. The equipment is, and shall at all times be and remain, personal property notwithstanding that the equipment or any part thereof may now be, or hereafter become, in any manner affixed or attached to, or imbedded in, or permanently resting upon, real property or any building thereon, or attached in any manner to what is permanent as by means of cement, plaster, nails, bolts, screws or otherwise.

25. Interest. Should lessee fail to pay any part of the rent herein reserved or any other sum required by lessee to be paid to lessor, within ten (10) days after the due date thereof, lessee shall pay unto the lessor interest on such delinquent payment from the expiration of said ten (10) days until paid at the rate of seven per cent (7%) per annum.

26. Offset. Lessee hereby waives any and all existing and future claims, and offsets, against any rent or other payments due hereunder; and agrees to pay the rent and other amounts hereunder regardless of any offset or claim which may be asserted by lessee or on its behalf.

27. Non Waiver. No covenant or condition of this lease can be waived except by the written consent of lessor. Forbearance or indulgence by lessor in any regard whatsoever shall not constitute a waiver of the covenant or condition to be performed by lessee to which the same may apply, and, until complete performance by lessee of said covenant or condition, lessor shall be entitled to invoke any remedy available to lessor under this lease or by law or in equity despite said forbearance or indulgence.

28. Entire Agreement. This instrument constitutes the entire agreement between lessor and lessee; and it shall not be amended, altered or changed except by a written agreement signed by the parties hereto.

29. Notices. Service of all notices under this agreement shall be sufficient if given personally or mailed to the party involved at its respective address hereinafter set forth, or at such address as such party may provide in writing from time to time. Any such notice mailed to such address shall be effective when deposited in the United States mail, duly addressed and with postage prepaid.

30. Gender; Number. Whenever the context of this lease requires, the masculine gender includes the feminine or neuter, and the singular number includes the plural; and whenever the word "lessor" is used herein, it shall include all assignees of lessor. If there is more than one lessee named in this lease, the liability of each shall be joint and several.

31. Titles. The titles to the paragraphs of this lease are solely for the convenience of the parties, and are not an aid in the interpretation of the instrument.

32. Time. Time is of the essence of this lease and each and all of its provisions.

IN WITNESS WHEREOF the parties hereto have executed these presents the day and year first above written.

By.....
Title

By.....
Title

By.....
Title

By.....
Title

Lessor

Lessee

(Seal)

(Seal)

Courtesy of United States Leasing Corporation

580 California Street, San Francisco 4, California

Addr.