ACCOUNTING FOR SELF-INSURANCE--
THEORY AND PRACTICE

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CHAPTER I

INTRODUCTION

What Is Self-Insurance?

The term "self-insurance" is used in accounting to define a plan by which a company assumes either the partial or full risk of some future asset-reducing event or events instead of insuring this risk with a private agent. These reductions of assets may be in the form of losses caused by fires, injuries and damages, and/or workmen's compensation payments.

Like many other accounting terms, the accuracy and adequacy of "self-insurance" is questionable and controversial. Paton says, "Strictly speaking, the phrase 'self insurer' is a misnomer. There is only one way to insure, and that is to buy appropriate insurance."¹ Newlove and Garner consider a self-insurance reserve ". . . misleading . . . since insurance infers the sharing of risk with others, and when this reserve is used the risk is assumed by the company in question."² Mowbray contends that any plan that omits a definite fund to replace the lost asset is "non-insurance" instead of


"self-insurance." Although the term "self-insurance" is inadequate to some accountants, it will be used throughout this paper for lack of a more generally used or a more descriptive term for laymen and accountants.

Requirements for a Successful Self-Insurance Program

According to Loschen, a financially strong business with a large number of risks that are small and uniform in size, that are equally hazardous, and that are decentralized will have the greatest success with a self-insurance program. A financially strong firm is the only type capable of self-insuring. Self-insurance would be disastrous to the business that could not absorb significant asset losses at a given time without hindering its working capital. If the risks are small and uniform in size, the self-insuring firm will be able to determine approximately what would be expected of its working capital at the time of a loss of a unit. The risks must be scattered so that not more than one or an insignificant number or amount will be lost at any given time. The primary purpose of a self-insurance program is to eliminate the cost of premiums for outside insurance. Loschen's discussion

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pertained to a self-insurance plan for fire loss, but his ideas represent a guide for any type of self-insurance program.

Purpose of the Study

In 1955, the American Institute of Accountants (hereafter called AIA) reported on self-insurance reserves as follows:

There were 125 such reserves shown by 109 survey companies in their 1954 annual reports. They were ordinarily shown above the stockholders' equity section of the balance sheet. In relatively few cases where there were either increases or decreases in the reserves during 1954 did the reports disclose the accounts to which the related charges or credits were made. When there were such disclosures, the information available indicated that charges were to the income account and credits to the income account, the retained earnings account, or an asset account.\footnote{American Institute of Accountants, Accounting Trends and Techniques In Published Annual Reports, 9th ed. (New York, 1955), pp. 100-101.}

According to the AIA's report, accounting for the origination and administration of self-insurance programs was seldom disclosed in the financial statements of the self-insuring companies.

This study is an investigation of the theoretical accounting viewpoints and the accounting procedures used in business practice for the origination and administration of a self-insurance program.
The purpose of this study is to compare the correct theoretical accounting procedures for self-insurance planning with those used in practice today.

Methods and References Used

Theoretical accounting viewpoints discussed in this paper were obtained from accounting and other business textbooks and periodicals in the North Texas State College library. Accounting procedures for self-insurance planning followed by companies at present were obtained through questionnaires sent to fifty industrial companies, ten public utility companies, and ten railway companies. The names of these seventy companies were found in the 1956 editions of Moody's Industrial Manual, Moody's Public Utility Manual, and Moody's Transportation Manual and were those whose 1955 balance sheets indicated some type of self-insurance reserve.
CHAPTER II

THEORY OF ACCOUNTING FOR THE ORIGINATION OF THE
SELF-INSURANCE RESERVE AND THE PROPRIETY
OF A SUPPLEMENTARY FUND

Source of Reserve

Accounting theorists cite two sources from which a self-insurance reserve may originate. One source is a periodic charge against income, and the second is an appropriation of retained earnings. The former procedure may create a type of liability or contra-asset account depending on the views of the accountant while the latter is simply an earmarking of retained earnings. A fund to actually absorb the asset loss may accompany either procedure.

Charge Against Income

Newlove and Garner favor making periodic charges against income to set up the self-insurance reserve. Bell says "consideration should be given to the equalization of such injuries and damages] losses over the respective periods so that the operations in any one period will not be unduly burdened." Holmes, reporting on a reserve for fire losses,

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1 Newlove and Garner, op. cit., p. 173.
says, "In order to equalize expenses, ... a company will charge an expense account and credit a reserve ... ." 

The primary purpose of this procedure is to ease the burden of any particular period in which the non-insured asset loss may occur. It may be reasoned that hypothetical small losses are recorded against the income of each period of operation instead of recording the actual asset loss which is expected to occur in any one period of operation. Concerning this procedure, Finney and Miller state "... it is often difficult to decide whether a reserve intended to even out expenses and losses by years should be condemned as a device to equalize reported earnings or accepted as a sensible procedure to determine more accurately periodic net income." 

The fact remains that the charge to periodic income to establish this reserve is not a proper one. A loss that has not occurred is not a proper charge to income; and, therefore, this cannot be considered "a sensible procedure." A more accurate periodic net income cannot possibly be determined by the use of this procedure. The accuracy of periodic income has no dependence on the equalization of burden to all periods of operations. The AIA states emphatically that "... reserves should not be used for the purpose of equalizing

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reported income."\(^5\) By their own admissions, supporters of this method recommend it for an equalizing effect on periodic income which, in itself, makes this approach unsound.

Most writers who favor the preceding method agree that the corresponding credit should be to some liability account. Byrnes, Baker, and Smith suggest that it be classified "... under 'long term debt' or better, under a separate liability classification 'reserves'."\(^6\) Newlove, Smith and White state:

Viewing the balance sheet as a dated statement, the reserve is a net worth item, as the reserve becomes available for dividends if the practice of self-insurance is discontinued. Viewing the reserve from an operation standpoint, the reserve is a budgetary-liability item, as in the long run the reserve will be wiped out by fire losses. Apparently to list the reserve for fire insurance as a liability but outside either the current liability and fixed liability groups seems to be a wise compromise.\(^7\)

Kohler says that the equalization reserve balance "... under more conservative accounting methods, would be divided between reasonably determinable accrued obligations and an earned surplus subdivision or unappropriated earned surplus."\(^8\)

These conflicting opinions only add to the confusion and inadequacy of this approach. All of the above sources:


with the idea of making the reserve something that it is not. To make it a net worth account at any given time, in itself, cannot be condemned for it is an accumulation of earnings; however, it must be remembered that the accumulation came about by a charge against previous periodic income, and this distortion cannot be condoned. The AIA is against the use of the word "reserve" to accompany the above account created by charges to income. It recommends "estimated liabilities" or "liabilities of estimated amount." While this narrows the use of the confusing term "reserve", it complicates the AIA's stand on equalization accounts. By changing the name of the account, its origination is not more justified. The fact remains that income of previous periods was charged to establish the balance of this equalization account, and a change in the name cannot alter this incorrect procedure. The writers favoring equalization argue about the liability class, if any, under which the account should appear. Byrnes, Baker and Smith admit: "Since casualties are not predictable, the liability provision for them should not be classified among the current liabilities." For the same reason, why should they be placed among any class of liability? There is positively no liability involved.

9AIA, Accounting Terminology Bulletins Number 1, Review and Resume, prepared by Committee on Terminology (New York, 1953), p. 28.

10Byrnes, Baker, and Smith, op. cit.
Magruder presents an even more interesting argument by favoring a corresponding credit to a contra-asset account. This view concerns the self-insurance of fire loss only; therefore, the contra-asset account would have a negative effect on the book value of the non-insured assets.\textsuperscript{11} In the determination of depreciation rates, Magruder says, "All factors, physical and functional, that contribute to the termination of beneficial life should be taken into consideration."\textsuperscript{12} Magruder believes that fire loss is definitely one of these factors; therefore, he contends that when insurance is purchased from an outside agent, the premiums paid to the insuring agent represent the part of depreciation cost attributed to possible fire loss. He states further that "... the mere decision to assume the risk should not be permitted to imply that the profit of the period in thereby increased."\textsuperscript{13} According to Magruder, it would seem that every asset has an inherent inflammable nature and that this potential should be recognized in the allocation of the asset's cost over the benefited periods. Is this a sound argument? Paton states that "... the plain fact is that a casualty does not accrue."\textsuperscript{14} For all assets, casualty loss is "... a


\textsuperscript{12}Ibid.

\textsuperscript{13}Ibid.

possibility but is not the inevitable outcome."\textsuperscript{15} Although all or a part of a company's assets may be destroyed by fire or some other event, the property is not harmed in any way by only the presence of this risk; and the passing of several safe periods gives no justification for the enlargement of the risk. When the sale of a business is being planned, Paton says, "... the vendor would certainly vigorously reject the view that an amount should be deducted from the value of existing assets to reflect the fact that fire and other casualties were statistically overdue."\textsuperscript{16} In the same line of thought, Paton cites the example of a reserve account (contra asset) which is built up year after year. When the balance in the account is equal to the total value of the related uninsured property, a purchaser approaches the stockholders with an offer to buy the assets. By deducting this contra account from the assets, the business is following the line of thinking that the uninsured assets have been wiped out by a fire or casualty that has not occurred.\textsuperscript{17} This is an extreme example, because assets are not usually sold at book value, but it points out the absurd results of this approach. It has been said earlier that the primary reason for

\textsuperscript{15}Ibid., p. 144.


\textsuperscript{17}Paton, \textit{Corporation Accounts and Statements--An Advanced Course}, p. 144.
self-insuring is to reduce costs. Magruder's claim is that
the premiums that would be paid to an outside agent for in-
surance purposes should be charged against revenue, or profits
for the period will be overstated. The reduction or cancelling
of a cost cannot be considered as a scheme to overstate profit
for the period. This would defeat the purpose of manage-
ment's planning. If every cost that was reduced or cancelled
should be, nevertheless, charged against income in order not
to overstate profit, a business would never improve its
financial position; and there would be no need for management
decisions on cost reduction. The use of any procedure for
self-insurance planning originating from a charge to income
is definitely untenable from a theoretical accounting viewpoint.

Appropriation of Retained Earnings

Paton says that without actual insurance it is impossible
for a business "... to alter the impact of losses ..."\textsuperscript{18}
No self-insurance plan is a cure-all for the substitution of
outside insurance. The procedure of appropriating retained
earnings is no exception, but it does not have as distorting
effect on periodic income as the preceeding method. Paton
explains:

The inescapable conclusion is that a "reserve"
for a casualty loss that has not taken place is
nothing more nor less than a slice of the exist-
ing stockholders' equity, and that it is improper

\textsuperscript{18} Paton, Advanced Accounting, p. 600.
to set up such a "reserve" by charges to revenue. If it is desired to suggest the exposure to risk by accounting classification the only acceptable procedure is the earmarking of retained earnings.19

The 1954 edition of the Financial Handbook states: "A mere bookkeeping entry setting aside a reserve for insurance out of surplus is an illusion."20 "A mere bookkeeping entry" might be correctly termed an "illusion," but an accounting entry with some interpretation is not. The primary purpose of earmarking or appropriating retained earnings is to restrict dividend payments to stockholders. If, by this restriction, a business' working capital is strengthened in any degree for an uninsured loss, or any other type of asset crisis, is the entry an illusion? Paton points out that the most significant part of the earmarking process is not the sub-division of retained profits of preceding profits but the restriction that is put on cash dividend payments by the entry.21 It must be understood that the appropriation in no way guarantees any kind of fund or cash will be available at the time of the asset loss and that the charge to income method also tends to restrict dividends by understating profit for the period. These facts, as far as theory is

19 Paton, Corporation Accounts and Statements--An Advanced Course, pp. 144-45.


21 Paton, Corporation Accounts and Statements--An Advanced Course, p. 145.
concerned, have no ill effect on the preference of the appropriation method over the charge to income method. The appropriation of retained earnings for self-insurance may be substituted by a footnote to the balance sheet which simply indicates that the company is a self-insurer. Paton and Littleton favor this procedure and consider it more informative than sub-division on the balance sheet. They contend that "all surplus may be viewed as a general-purpose buffer . . . and there is little to be gained by the use of fancy labels." This represents an extreme view. Actually, the classification of appropriated retained earnings should not be confusing to the layman and may be very practical because most readers of financial statements consider footnotes cumbersome and technical.

If there is to be a restriction of retained earnings for self-insurance disclosure, it can only be placed in the net worth or stockholders' equity section of the balance sheet under appropriated retained earnings. MacNeal states: "The practice of exhibiting appropriated surplus under a separate balance sheet caption, along with other types of reserves, is confusing to the layman and may mislead them into concluding that these reserves are valuation accounts, or liabilities."

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The AIA concurs with the foregoing discussion in the following statement:

... reserves such as those created ... for any indefinite possible future loss ... are of such a nature that charges to such reserves should not enter into the determination of net income ... Accordingly, a [like] reserve ... should be created by a segregation or appropriation of earned surplus, ... and ... it should preferably be classified in the balance sheet as a part of shareholders' equity. 24

The 1956 edition of the Accountants' Handbook presents the following compromising viewpoint: "The proper treatment of self-insurance is contingent upon the question of whether the losses for which the reserve is established accrue or do not accrue." 25 The reserve would be established by a charge to income only when there is an obligation which can be reasonably estimated and which could be expected to accrue from period to period. This source considers workmen's compensation as an example of this type of obligation. Fire loss is said not to accrue because even an actuarial calculation is only hypothetical. 26 This line of thought puts significance on the need for accurate estimation. The question arises: How can compensation to employees (caused by lay-offs and injuries) be estimated for any given period or periods?

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26 Ibid.
Even if industry were blessed with a safe environment and a stable economy, how could this burden for each period be estimated any more accurately than an actuarial estimation of fire loss? Both of these asset-reducing events defy estimation in the same degree. It must be stressed that there is no foundation for the argument of recognizing these events before they occur. This would be true even if a business had the supernatural capacity to foresee each and every loss to the termination of its activities. Its management could prepare for the losses. But why should consideration be given to the setting up of a reserve by equal charges to each period of operation? The equalization of any kind of subsequent loss is not acceptable to accounting theory no matter what entries are used to glamorize this approach. The appropriation of retained earnings is the procedure which appears to be more nearly flawless from a theoretical viewpoint.

Use of a Fund

Non-accounting writers are usually in favor of a self-insurance fund of cash and/or securities to accompany self-insurance planning. The 1954 edition of the Financial Handbook states: "Unless self-insurance is reinforced by a fund ... it is of doubtful value." Some accounting writers favor this view also. Newlove, Smith and White say, "If the

27 Bogen, editor, Financial Handbook, Sec. 18, p. 749.
individual assets are at all sizable, a Fire Insurance Fund should be established to make certain that the working capital needed to replace burned assets will be available." There is little to favor the view to replace "sizable" assets from an accumulated fund. To set aside a large amount of cash and/or cash items in a fund to cover the loss of uninsured assets would be very impractical from a management standpoint. Paton points out that even if a business could afford to set aside such a large amount, this practice would place too much cash in liquid and low-yielding securities in the fund. If a company did not have sizable uninsured units, the fund would be even more unnecessary because any one loss could be easily absorbed. It must be emphasized again that self-insurance is dangerous for a business in a weak financial position. This would surely include those with burdened working capitals. The management of a company should never undertake a self-insurance program unless it thinks that the working capital position is strong enough to absorb any non-insured loss without the aid of an emergency fund. On the other hand, a management which knows its financial position to be very strong should give little weight to a supplementary fund in its self-insurance planning. A fund simply ties up assets that a company could be using in some other investment or non-investment phase of its business. A large


29 Paton, Corporation Accounts and Statements--An Advanced Course, p. 146.
fund can also give an impression of uncertainty as to the capability of the working capital to absorb the loss, and a company that thinks that it must have a fund would probably be in a lot better financial position and feel more secure with outside insurance. The fact is that no fund is sufficient until it completely covers the replacement costs of all the non-insured assets, and the fact that this is an impractical build up of a large amount of cash and low-yielding securities has already been cited.

Investments purchased by the fund are usually low-yielding because they must be extremely stable to market reactions and have good marketability. Government securities would probably be the most popular purchase by the fund. Municipal securities would be attractive because their interest is tax-free and helps the accretion of the fund; however, this type of security suffers at times because of poor marketability and is hard to sell in a rising interest market without grave loss to principal. Held to maturity in a good bond market, municipal securities would be profitable to the fund. A special bank savings account would be another type of safe, liquid, and low-yielding investment for the fund.

Accretion of the fund may come in various ways. Bell and Johns recommend periodical additions of cash equal to premiums that would have been paid to an outside agent for insurance. The use of this amount is questionable. The

premium is a cost figure for insurance coverage and not a figure for future estimated loss in assets which the fund is expected to absorb. Holmes recommends that the income from the fund be closed out to the reserve for self-insurance which has been appropriated from retained earnings.\textsuperscript{31} This is misleading in that it implies a relation between periodic income and appropriated retained earnings which does not exist. All income must be closed to unappropriated retained earnings, and the desired appropriations are then made to the individual reserve accounts. The over-all argument for the establishing of a fund for uninsured loss is weak and is not necessary from a theoretical standpoint. The appropriation of retained earnings for self-insurance in no way commands a supplementation of a fund of cash and other liquid items.

\textsuperscript{31}Holmes, Auditing Principles and Procedures, p. 350.
CHAPTER III

ADDITIONS TO THE SELF-INSURANCE RESERVE AND
THE RECORDING OF THE ACTUAL LOSS

Determination of Reserve Balance

There are various means used in the determination of the amount in the self-insurance reserve at any given time. Some of the methods are associated especially with the procedure of charging income for the self-insurance reserve; however, they will be discussed for the sake of comparison with the proper methods.

Adjusting Reserve to Calculated Amount

The reserve may be appropriated for an amount based on a per cent of uninsured assets. The per cent depends on the weight given by management or the individual controller to such earmarking. It has been mentioned earlier that the amount appropriated has no definite effect except on dividend distribution; therefore, the appropriation of any certain per cent would depend also on the amount of other appropriations planned, the amount of retained earnings that is available for appropriation, and, of course, the total amount of retained earnings. The actual amount shown in the reserve has no real significant meaning. Its appearance on the balance sheet is simply a procedure of disclosure. An extreme example
would be that of a newly formed corporation with a capital section of common stock only, no liabilities, few uninsured assets, and a strong current position. There would be no retained earnings; therefore, there could be no appropriation for self-insurance. This fact does not prohibit the company from self-insuring. It probably would be a very successful self-insurer, but it would have no reserve until future earnings are accumulated and appropriated for this purpose. This appropriation may or may not occur but the company will continue to self-insure if its position remains favorable for such planning. The method of keeping an appropriated reserve at a certain per cent of uninsured assets is not objectionable; however, a per cent of retained earnings is a strong possibility if a large number of restrictions are placed on this accumulation of profits at the discretion of the management. Neither of the two methods abuses theory; therefore, either would be appropriate if a definite balance is preferred for the self-insurance reserve at all times.

Using Previous Loss Experience as Charge

The use of either of the two preceding methods would be highly improbable if the reserve were established and adjusted by charges to income. It has already been said that the primary purpose of the equalization process is to regulate periodic income; therefore, estimation of possible future losses based on historical losses is one of the preferred methods. If the company is relatively new and has no loss
experience, it will probably use the loss record of an established business in its field. By this procedure, an equalization reserve is established and maintained at a balance that will most probably be able to absorb the expected losses when they occur. The reserve will never be any significant figure. It may have a relatively small or large balance depending on the recurrence of non-insured losses.

Using Cost of Carrying Insurance with a Private Company

Probably the favorite method of the writers who favor income equalization by a charge to income to establish the reserve is that of charging the amount that would have been paid for outside insurance premiums. Newlove and Garner explain: "The expectation is that actual losses sustained over a period of years will be less than the premium on regular policies."¹ The fact remains that the amount of outside premium is a bona fide cost for a company which elects not to self-insure and is not an estimation for a reserve that absorbs the non-insured losses as they occur. Like all equalization procedures, the charge of the amount of premium to expense fails to disclose the cost reduction brought about by self-insurance planning. The expectation of smaller losses than the amount of premium that would have been paid is simply wishful thinking so that the equalization reserve will not be wiped out by a huge loss.

¹Newlove and Garner, Advanced Accounting, I, 173.
Recording the Actual Loss

If an equalization reserve for self-insurance is built up by periodic charges against income, the non-insured loss is charged against the reserve when it occurs. If the preferred method of appropriating retained earnings is in use, the following procedure is followed.

**Charge Expense and Return Part or All of Appropriation to Retained Earnings**

Moonitz and Staehling charge the non-insured loss (determined by the write-off of book value) to an expense account and supplement the entry returning an amount equal to the loss to retained earnings from the appropriated reserve.² In this way, the net effect on unappropriated retained earnings is nil, and the current income picture is not distorted. The same writers explain "... that the ... loss should not be charged directly against the 'reserve' [for self-insurance] account, since to do so would by-pass the earned surplus account [and the income statement], and therefore would constitute a species of distortion of the operating history of the company."³ The remaining balance in the reserve may be treated as corporate policy dictates. It is not an accounting problem.⁴

This entire procedure is not necessarily mandatory. As far as the amount returned to unappropriated retained earnings is concerned, no certain amount is significant. The amount used in the foregoing procedure is not a theoretical necessity. The amount returned may or may not exceed the loss. This action was recommended simply in order not to disturb a certain balance in the retained earnings. It is no more than a maneuver of figures. The reserve for self-insurance balance may be left unchanged. Again, this would be determined by corporate policy. The main theoretical interest in this procedure is that it charges the loss against income only after the loss occurs and does not distort periodic income in any way.

**Presentation of Loss on Statements**

There is some disagreement among accountants whether the above procedure should always be used. Some favor the charge of the loss to be directly to retained earnings rather than against the income of the period. This procedure, of course, will distort the complete operation picture for the period. From a theoretical standpoint, all recurring and non-recurring events should be shown in the periodic income account. This concept is known as the clean surplus theory. All gains and losses are carried through the income account, and the final net income is transferred to retained earnings. Paton and Littleton recommend a two-part income statement in order not
to confuse the layman.\textsuperscript{5} It must be realized that the net income figure is a most significant figure to the stockholder. Because of the fact that income for several periods is usually compared, this type of statement will be necessary in order to follow theory and disclose to the stockholder the actual operational items in which he is most interested. The use of this statement presents the non-insured loss in the period in which it occurs; however, it will be shown in a section separate from recurring items.\textsuperscript{6} Its true significance to periodic income will be disclosed, and the stockholder may judge its importance.

The alternate procedure is to by-pass the income account by a direct charge of the loss to retained earnings. In this way, the final periodic income figure on the profit and loss statement will not be affected by this loss. This may be done in practice for the sake of the stockholders' attitude toward periodic income. The AIA states:

\ldots there should be a general presumption that all items of profit and loss recognized during the period are to be used in determining the figure reported as net income. The only possible exception to this presumption relates to items which in the aggregate are material in relation to the company's net income and are clearly not identifiable with or do not result from the usual or typical business operations of the period.\textsuperscript{7}

\textsuperscript{5}Paton and Littleton, \textit{An Introduction to Corporate Accounting Standards}, p. 102.

\textsuperscript{6}\textit{Ibid}.

\textsuperscript{7}\textit{AIA, Accounting Research Bulletin, No. 42}, p. 63.
Using this line of thinking, an uninsured loss would be written off against retained earnings if it affected net income for the period by a significant amount. Whether an amount would be considered significant would depend on the individual business, on its relation to net income, and on the total amount of uninsured loss incurred during the period. The fact remains that full disclosure of periodic operations will not be shown if the clean surplus theory is not used. The AIA recommends the combining of the income and retained earnings statements in order to show more clearly the complete operations for the period.\(^8\) If this is done to be more theoretically correct, it does not succeed because the net income figure is still distorted.

The use of the clean surplus theory and the two-part income statement discussed earlier is the more acceptable procedure.

**Summary of the Correct Theoretical Accounting Procedures for Self-Insurance**

If it is desired to disclose in the body of the balance sheet the fact that a self-insurance program is in force, the correct theoretical accounting procedures may be summarized in this way:

1. The self-insurance reserve should be created and all subsequent additions should come from appropriations of retained earnings.

\(^8\)Ibid., p. 17.
(2) The reserve should appear in the net worth or stockholders' equity section of the balance sheet under the heading of appropriated retained earnings.

(3) The determination of the amount in the reserve is a matter of corporate policy; it is not a significant figure.

(4) A separate investment fund for the replacement of the non-insured asset losses is usually neither necessary nor advisable.

(5) When the non-insured loss occurs, it should be charged against the income of the period, and all, a part, or more of the reserve may be returned to unappropriated retained earnings, depending on corporate policy.
CHAPTER IV

SELF-INSURANCE PLANNING AND THE FEDERAL
INCOME TAX

There is no definite tax advantage for a company that self-insures over one that purchases outside insurance or vice versa. Business Week presented the following discussion:

Now that [corporate] taxes are so high, the balance seems to be tipping toward regular insurance. You can't deduct self-insurance reserves for tax purposes until you have actual losses. But you can deduct your insurance premiums as a normal cost of doing business . . . .

A company paying the top tax rate (70 per cent) [now 52 per cent] could say it was paying only 30 cents per premium dollar. Suppose the company had self-insurance this year [1952] and had no losses. Out of every premium dollar it had saved, 70 cents would be taken in taxes. Of course, the picture isn't that simple because: (1) the company would have other tax deductible expenses due to self-insurance, such as salaries and expenses of extra people it would need to provide safety-engineering, legal, and claim services and (2) a large self-insured company would be bound to have some (tax deductible) losses.¹

This discussion provides an interesting non-accounting view of self-insurance's effect on the income tax of taxable corporations. Little weight should be given to the fact that the higher the tax bracket of the corporation the lower the cost "per premium dollar" of outside insurance since the prime

¹ "Insurance Switch," Business Week, Number 1186 (May 24, 1952), 156-57.
purpose of self-insurance is cost reduction. In the long run, the amount of asset losses and the tax periods in which they occur will determine what method of insuring would be the most profitable from a tax standpoint. Loschen explains:

Insurance premiums paid for outside insurance would be deductible as a business expense in a more or less uniform amount year by year. If a taxpayer is self-insuring, losses, and consequently deductions, may be much less regular in amount; if the experience over an extended period results in losses equal to the total insurance premiums which would otherwise have been paid, the tax effect would depend upon the distribution of the losses among high-profit and low-profit years, i.e., total income taxes would be less if losses occurred and could be deducted during years of high profits, and they would be more if losses occurred during years of low profits or of operating losses.2

Unfortunately, the occurrence of all these factors cannot be predicted. The conclusion is that in deciding whether to self-insure or not, the tax question should not be given any significant weight.

As far as the tax effect on the theoretical accounting procedures used to originate a self-insurance program, no procedure is more theoretically correct because of its agreement with tax laws; however, the appropriation of retained earnings procedure to establish the reserve is in agreement with the tax viewpoint. If an equalization reserve is established by charges to periodic income, a necessary

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adjustment to the books must be recorded or a separate set of books must be kept for tax purposes. The correct theoretical accounting method of self-insuring and the tax code both recognize the non-insured loss only when it occurs. This is one of the rare instances in which the tax viewpoint and accounting theory are in complete harmony.
CHAPTER V

ACCOUNTING PROCEDURES FOR SELF-INSURANCE IN PRACTICE

Twenty-five industrial companies, nine public utility companies, and three railway companies had returned complete and usable answers to the questionnaire on accounting procedures for self-insurance at the time of the writing of this thesis. The names of these companies are listed in the Appendix. The results of the questionnaire are discussed below.

Self-Insurance Reserves for Fire Loss

Table I presents the number of self-insurance reserves for fire loss reported, and how they were originated.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Reserves Originated by</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Charge to Income</td>
<td>An Appropriation of Retained Earnings</td>
</tr>
<tr>
<td>Industrial</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Utility</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rail</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

30
Table I indicates that a large majority of the reserves were originated by a charge to income.

It must be pointed out also that of the two reserves originated by an appropriation of retained earnings, one has been eliminated; and the other has been changed to an equalization reserve by additions, based on cost of outside insurance, made from periodic income charges. This latter reserve also is charged with the non-insured fire losses when they occur.

The sixteen reserves reported by the industrial group that were originated by charges to income are charged with non-insured fire losses when they occur. Eleven of the sixteen reserves are classified as liability items; and three are given separate classification on the balance sheet. Additions to nine of the sixteen reserves are determined by previous loss experience; additions to six are determined by cost of outside insurance; and additions to one are determined by a combination of these two methods. All additions are made by charges to income. Four funds were reported by this group. The investments were in cash and government bonds.

The public utility reserve originated by a charge to income is charged with the non-insured losses when they occur and is classified as a liability item on the balance sheet. Additions to it are charged to income and are determined by previous loss experience. No fund supplements the reserve.
The three reserves reported by the railway group are charged with the non-insured losses when they occur and are classified as liability reserves on the balance sheet. Additions to two of them are determined by previous loss experience while additions to one are periodic budgetary amounts. All additions are made by charges to income. No funds were reported by this group.

Self-Insurance Reserves for Injuries and Damages and/or other Non-Insured Risks

Table II presents the number of self-insurance reserves reported for injuries and damages and/or other non-insured risks, and how they were originated.

**TABLE II**

**NUMBER OF SELF-INSURANCE RESERVES REPORTED FOR INJURIES AND DAMAGES AND/OR OTHER NON-INSURED RISKS BY TWENTY-FIVE INDUSTRIALS, NINE UTILITIES, AND THREE RAILS**

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Reserves Originated by</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A Charge to Income</td>
<td>An Appropriation of Retained Earnings</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>20</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Utility</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Rail</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Table II indicates that the charge to income procedure is again preferred for originating the reserves.
Of the two reserves originated by an appropriation of retained earnings, one has been eliminated while the other is classified as a liability reserve on the balance sheet. The latter, however, is not an equalization reserve, and all non-insured losses are charged to expense. The balance in this reserve is frozen and no periodic additions are made.

With one exception, the twenty reserves reported by the industrial group that were originated by charges to income are charged with the non-insured losses when they occur. The exception is a reserve whose balance has been frozen, and non-insured losses are charged to expense when they occur. Fourteen of the twenty reserves are classified as liability items; two are classified as net worth items; and four are classified separately on the balance sheet. Additions to eleven of the twenty reserves are based on previous loss experience; additions to six are determined by the cost of outside insurance; and additions to four are periodic budgetary amounts. All additions are made by charges to income. Five funds were reported by this group. The investments were in cash and government bonds.

The nine reserves reported by the public utility group are charged with the non-insured losses when they occur. Six of the nine reserves are classified as liability items; two are classified as net worth items; and one is classified separately on the balance sheet. Additions to four of the nine reserves are based on previous loss experience; additions
to four others are periodic budgetary amounts; and additions to one are based on the cost of outside insurance. All additions were made by charges to income. No funds were reported by this group.

The two railway reserves are classified as liability items on the balance sheet, but only one is charged with non-insured losses when they occur. The other reserve does not absorb the losses, and they are charged to operating expense of the period. Additions to one reserve are determined by previous loss experience, while additions to the other are periodic budgetary amounts. No funds were reported by this group.

Conclusion

The conglomeration of procedures reported by the thirty-seven surveyed companies reveals that the correct theoretical accounting procedures for self-insurance are seldom followed in practice today.

It should be pointed out that public utility companies are regulated by the Federal Power Commission, under the "uniform classification of accounts" specified by this regulating agency, the accounting for self-insurance is an equalization process. Railway companies also have a "uniform classification of accounts" under the Interstate Commerce

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Commission which also specifies equalization procedures for self-insurance accounting. Although one of the reserves reported by the railway group does not absorb non-insured losses when they occur, it cannot be determined whether this is a deviation from the required accounting procedure or a misunderstanding of the questionnaire.

The fact remains that an accounting procedure's theoretical soundness is not aided by its endorsement by a regulating agency. The required accounting procedures of equalization used by public utility and railway companies in this survey are theoretically unsound.

The election of the industrial companies of this survey to use equalizing accounting procedures can only be a result of corporate policy.

The conclusion of this study is that because of the importance of the periodic net income figure to stockholders and the general public, theoretical accounting procedures for self-insurance planning are impractical in business today. The correct theoretical accounting viewpoint recognizes the non-insured asset losses only when they occur, and artificial charges are not made to previous and subsequent periods to aid the period of occurrence absorb the loss. This viewpoint and the resulting procedures would present true, but sometimes

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volatile, periodic income reports. Because of the over-
significance given such reports by stockholders and the gen-
eral public, companies elect to use procedures that accomplish
equal charges to periodic income. Until definite restraints
are made on procedures used to equalize or smooth periodic
net income, theoretically correct periodic net income figures
will seldom appear on the financial statements of companies
in today's business practice.
APPENDIX

The accounting procedures for self-insurance in business practice presented in Chapter V of this thesis were obtained from the following industrial, public utility and railway companies.

Industrial Companies

Amerada Petroleum Corporation
American Radiator and Standard Sanitary Corporation
A. O. Smith Corporation
Carnation Company
Central Aguirre Sugar Company
Cerro De Pasco Corporation
The Eagle-Picher Company
E. I. Du Pont De Nemours and Company, Inc.
The Firestone Tire and Rubber Company
F. W. Woolworth Company
General Aniline and Film Corporation
Hercules Powder Company, Inc.
Idaho Maryland Mines Corporation
International Paper Company
Kennecott Copper Corporation
Lone Star Cement Corporation
National Tea Company
Pittsburgh Plate Glass Company
The Proctor and Gamble Company
The Quaker Oats Company
St. Joseph Lead Company
Sinclair Oil Corporation
Skelly Oil Company
Socony Mobil Oil Company, Inc.
United Shoe Machinery Corporation

Public Utility Companies
Bangor Hydro-Electric Company
California Electric Power Company
Carolina Power and Light Company
Duke Power Company
El Paso Electric Company
Idaho Power Company
Pacific Gas and Electric Company
Potomac Electric Power Company
Public Service Electric and Gas Company

Railway Companies
Atlanta and West Point Rail Road Company
New York Central System
Union Pacific Railroad Company
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**Articles**


**Publications of Learned Organizations**


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Federal Publications
