

5-1917

## Analysis of Financial Statements

Paul Havener

Follow this and additional works at: <https://egrove.olemiss.edu/jofa>



Part of the [Accounting Commons](#)

---

### Recommended Citation

Havener, Paul (1917) "Analysis of Financial Statements," *Journal of Accountancy*. Vol. 23: Iss. 5, Article 4.  
Available at: <https://egrove.olemiss.edu/jofa/vol23/iss5/4>

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Journal of Accountancy by an authorized editor of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

## Analysis of Financial Statements

BY PAUL HAVENER, C.P.A.

The credit man of today, whether he be commercial banker, investment banker, manufacturer or merchant, in seeking information as to the financial standing of a concern has many avenues from which he can obtain data. The mercantile agencies with their investigations and reports, the credit clearing houses, the local credit men's associations, the opinion of those with whom the concern has done business in the past—all these are available. These sources are, however, indirect and are all based largely upon hearsay and opinion. As to the general reputation of a concern, there is probably no better way of obtaining it, but as to its present financial standing—its ability to pay within sixty days for merchandise—this indirect method is dangerous and obsolete as compared with the concern's own financial statement—provided, of course, that this statement is true, properly prepared and verified. A true statement of a concern, showing on one side all its assets correctly valued and classified and on the other all its liabilities similarly treated, both as of a certain date, together with a history of its operations for the preceding periods, is the best means by which to pass judgment on the ability of a concern to meet its obligations at their maturity.

These financial statements are technically known as the balance-sheet and the profit and loss statement. A balance-sheet is a statement showing on one side all the assets of a concern as of a certain date and on the other side all the liabilities. Custom in this country places the assets on the left hand side and the liabilities on the right hand side. The difference between the assets and the liabilities, if the assets exceed the liabilities, is the net worth. In the case of corporations, this net worth will consist of capital stock, surplus and undivided profits. In partnerships, the net worth will be the capital accounts of the partners, together with any undivided profits. If the liabilities exceed the assets, there is no net worth or capital belonging to the owners left, and the difference represents the amount by which the concern is insolvent. The left-hand side of the balance-sheet shows what property the business has and the right hand side shows

to whom this property belongs. The profit and loss statement is an analysis of the operations of the business for a certain period of time, showing the total income and the expenses and losses during the period. It may be said that a balance-sheet is a cross section of a business, showing how it stands at a particular moment of time, and the profit and loss statement how it arrived at this present position from a previous one.

The assets of a business are of two distinct types—fixed assets and current assets. Both of these can be further divided, but to keep these two kinds of assets always separate is one of the most important things in reading a balance-sheet. Fixed assets, also known as permanent assets, invested assets, etc., are those which represent capital sunk into the business, which cannot be converted into cash except upon the liquidation of the business. They are usually such assets as land, buildings, machinery, equipment, furniture and fixtures, patent rights, goodwill, etc. These assets are not in the regular course of business convertible into cash, and therefore cannot be used to pay the current liabilities of the business. Current assets, also known as liquid assets, floating assets, quick assets, working assets, etc., represent cash and other assets that in the regular course of business will be cash, such as accounts receivable, notes receivable, merchandise on hand, etc. All past due or doubtful current assets should be called slow assets. The purpose of most businesses is to convert current assets into cash as soon as possible. What may be a current asset in one business may be a fixed one in another. A linotype machine in a newspaper office is a fixed asset; in the storeroom or warehouse of a machinery dealer, it is a current asset. A concern may have total assets to the value of several times its liabilities and yet be unable to meet its obligations as they mature. This frequently occurs and the reason is that current assets are lacking and fixed assets cannot be used to pay bills, and it is a well known fact that fixed assets as a general rule suffer high depreciation when they are converted into cash, seldom realizing their book value.

The liabilities of a business are also of two types, but the distinction is not so great as in the case of assets. The fixed liabilities are obligations which do not mature for several years. They are usually secured by mortgage on the fixed assets, such

### *Analysis of Financial Statements*

as mortgage notes, bonds, purchase money obligations, etc. Current liabilities, sometimes called quick liabilities, floating debts, etc., are liabilities which will have to be paid in cash within a short period of time, such as accounts payable, notes payable, payrolls, etc.

The difference between the total assets and the total liabilities of any business, as previously mentioned, is the net worth. An analysis of the different classes of assets and liabilities will show clearly where this net worth is invested.

With the balance-sheet and profit and loss statement as a whole visualized before us, let us dissect each item therein, as it is only by this process of analysis and critical inspection that we can arrive at a true understanding thereof.

We have before us the balance-sheet of A, B and Company, which is as follows:

BALANCE-SHEET  
A. B. & COMPANY  
As of June 30, 1916

*Assets*

FIXED:

Land and buildings, etc.	50,000.00	
Machinery and equipment	75,000.00	
Horses, wagons, etc.	5,000.00	130,000.00

SLOW:

Accounts past due	10,000.00	
Due from officials	20,000.00	30,000.00

CURRENT:

Cash on hand	21,000.00	
Notes receivable	2,000.00	
Accounts receivable	175,000.00	
Inventories	75,000.00	273,000.00

DEFERRED:

Prepaid insurance and licenses		600.00

Total assets 433,600.00

## *The Journal of Accountancy*

### *Liabilities*

CURRENT:

Accounts payable	40,000.00	
Notes payable	60,000.00	
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>	
Total liabilities		100,000.00
		<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>
		333,600.00
		<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>

### *Net Worth*

CONSISTING OF:

Capital stock	200,000.00	
Surplus	83,600.00	
Profit for year	50,000.00	333,600.00
	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>	<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>

The fixed assets are \$130,000.00, slow assets \$30,000.00, current assets \$273,000.00, and deferred assets \$600.00, making total assets of \$433,600.00. The total liabilities—all current—are \$100,000.00, leaving a net worth of \$333,600.00. If this statement is correct and shows the true financial position of the company, it is in excellent financial condition, current assets being over two and one-half times current liabilities and the net worth fully taking care of the entire investment in fixed assets as well as \$173,000.00 of the current assets.

### FIXED ASSETS

The first item of the fixed assets consists of land and buildings. On this particular item we ask the following question: Are there any liens or mortgages against the real estate and buildings? Many times a concern will have mortgages or purchase money obligations on this item and only show them on the balance-sheet at a net value; that is, the value after deducting the liens thereon. This is wrong. These liens or mortgages may fall due within a short period of time, seriously upsetting the relation existing between the current assets and current liabilities.

The next question is the basis of value. Is the land at cost? Is the building at cost, less a reasonable allowance for depreciation? Occasionally concerns, during a bad year's business, revalue their real estate by charging it with arbitrary amounts

### *Analysis of Financial Statements*

and crediting profit and loss. Real estate, which is a general term including both land and buildings, should be valued at the original cost in the case of land and cost less reasonable allowance for depreciation in the case of buildings. Any liens or mortgages thereon should appear among the liabilities of the company.

Does the concern own the land and buildings? Frequently, because these items appear on the books of the company, it is taken for granted that it owns them in fee simple. This is not always the case, and the ownership of this asset can easily be verified by procuring certificate from the local title guarantee company or by examination of the tax receipts. If neither of these be available, a statement can be obtained from a trustworthy attorney stating that he has examined the deeds and records and found that the real estate belongs to the concern.

The second item in the consideration of fixed assets is usually machinery and equipment. The important thing governing their valuation is depreciation. Depreciation is a general term and covers the gradual diminishing in value of an asset whether by wear and tear or by obsolescence. Many failures of concerns with long established records, which have paid large dividends and big salaries to their stockholders and employees, may be traced to the failure properly to provide for depreciation on the machinery and equipment. The machinery in a factory can become obsolete over night in this age of modern invention. There are numerous instances of cotton mills and fertilizer factories located throughout the south which, during the first years of their existence were financially successful, but put aside no money for depreciation on their plant and equipment, disbursing their excess receipts over apparent expenditures in dividends and salaries. Before they knew it, newer companies were organized with new machinery and equipment which could produce the commodity at a price less than the cost to the old concern. The result was, the old concern would try to meet the competition by selling its product at less than cost, and in a few years had not only consumed all of its net worth, but accumulated large current liabilities, and, in the final day of reckoning, stockholders got nothing and creditors a small percentage of what was due them.

Therefore, no matter how prosperous a manufacturing business may be today, unless this matter of depreciation is given due consideration, the day of failure is inevitable.

All items such as furniture and fixtures, automobiles, wagons, horses and mules should be revalued each year. The rate of depreciation on them varies so much, depending entirely on the use to which they are put, that no fixed rate of depreciation is satisfactory.

Hence, in summarizing, it may be said that tangible fixed assets should appear on the books of the company at cost less full depreciation. In the case of liens or mortgages thereon, these should be shown among the liabilities and not deducted from the assets. Intangible assets, such as goodwill, patent rights, trade marks, copyrights, franchises and concessions, are not always to be condemned, as in many instances they are assets easily converted into cash. They should always, however, appear on the balance-sheet under a separate heading and should not be included with the tangible fixed assets, as they now are by many of our largest corporations, desiring to cover up the so-called water in the capital stock issued.

#### CURRENT ASSETS

The first item of the current assets is usually cash. In more cases than one might suspect, this item is misleading. Banks sometimes ask concerns which are in the habit of overdrawing their accounts to deposit money with them, giving a certificate of deposit therefor. The concern then takes these certificates to other banks and borrows on them to the full amount of the certificate. I remember an instance which came up a few years ago when called upon to audit a concern whose financial statement as prepared by its secretary-treasurer showed over \$55,000.00 cash on hand. This cash on hand consisted of ten \$5,000.00 certificates of deposit, which were used as collateral to a \$50,000.00 loan, and sundry paid bills, post-dated cheques, due bills, and other memorandums in the cash drawer. As a matter of fact, there was not one cent of available cash. Cash on hand should consist of money in the cash drawer which, except in cases of concerns located in places where there is no bank, should be comparatively small, and of funds in banks subject to cheque and

### *Analysis of Financial Statements*

from which all outstanding cheques unpaid have been deducted. Pledged certificates of deposit, miscellaneous paid bills, due bills from officers or employees are not cash items and should never be so called.

In this balance-sheet notes receivable appear too small in relation to the other assets and should lead to inquiry as to whether or not the concern has rediscounted any of its notes. It is customary for a concern to rediscount its customers' paper and, if it is not paid at maturity, the concern rediscounting has to take it up, so this rediscounted paper is a contingent liability which is liable to become a real one at any moment. A few years ago a large concern in New Orleans had over \$200,000.00 of paper rediscounted which did not appear on their statement, and, in their final liquidation, over 80 per cent. was worthless. The financial statement of a concern should show somewhere the possible liability covering all paper rediscounted. The remaining notes on hand should be due from customers of the company. Notes from officers, employees and stockholders should be shown under a separate heading in the balance-sheet. Past due notes and doubtful notes should be put under a separate heading called "slow assets."

The thing to ask in connection with accounts receivable is how these accounts were created, whether entirely by legitimate transactions of the company or partly by items due from officers, employees, stockholders or merchandise sent on consignment. If the last be the case, these items should be eliminated and appear elsewhere in the balance-sheet. Another important matter is to ascertain whether any accounts have been sold to discount companies or assigned for any reason whatsoever. The practice of companies selling their accounts to discount companies, paying the exorbitant rate of interest of 12 per cent. per annum or over, is one that should be discouraged. It is the custom of many concerns to allow the customer a discount for prompt payment. The reasons for these discounts are not always financial ones, as many concerns which allow discounts are not borrowers of money at all. The principal reason in allowing a discount is that it closes the business transaction. The customer has his goods, has paid for them, the credit risk has been eliminated, and the money received. When accounts are sold to discount companies, the

## *The Journal of Accountancy*

credit risk has not been eliminated; the business transaction is not closed; nor has the money been received from the customer. Any concern which is in a financial position to sell its accounts to a discount company can as readily obtain money from a bank at a saving of over 50 per cent. in interest charges.

In the auditor's report on the audit of a company, he should state clearly the steps which were taken to verify the open accounts receivable appearing on the books of the company. This can be done by direct communication with the different debtors and should always be done, as it not only establishes the correctness of this item in the balance-sheet beyond any question of a doubt, but brings to the attention of the management of the concern which is being audited all disputed accounts and puts them in line for adjustment. Accounts receivable should appear at their net realizable value. Due care should be taken to see that full provision has been made for all possible deductions such as freights, returnable packages, rebates, special allowances, etc.

### INVENTORIES

The important things to consider in inquiring into the inventories of a company are the quantities, quality and price at which the inventory was taken, and whether or not there are any liens on any of the inventories or consigned goods included therein. This is probably the easiest part of the balance-sheet to state incorrectly, and the only way that you can be sure the inventory appears at the right valuation is to know that it has been thoroughly tested as to quantities, quality, prices, footings and extensions by disinterested outsiders. No merchandise should be included therein except that which is salable, and all merchandise should be priced at cost or market, whichever is lower. When the value of goods is reduced to market value, in many cases a further amount should be deducted to cover cost of selling, etc. A great many auditing firms accept the statements of officers of the company for the inventory. This is wrong. The inventory usually consists of over 60 per cent. of the total current assets and it is therefore one that should be thoroughly verified by the auditors.

## *Analysis of Financial Statements*

### SLOW ASSETS

Under the heading of slow assets should appear all investments which are not readily marketable, advances to subsidiaries, amounts due from officers and employees, accounts and notes past due. Many times large withdrawals of capital by the officers of the company or proprietors will appear under heading of accounts receivable, and the auditor in examining the books of the company will be met with the argument that they are good. If this is the case, the auditor's only recourse is to show them as slow assets and suggest to the officers of the company if they are good to pay them in full, and the cash will then, of course, appear under current assets. These withdrawals, when secured by stock of the same company, are really unsecured, and such items should be deducted from the capital of the company.

### DEFERRED ASSETS

Deferred assets consist principally of prepaid insurance and licenses. It is usually a small item except in cases of agricultural corporations, which close their books in the middle of a crop season. In many cases, inventories of supplies and materials should be put under this heading. It simply represents expenses prepaid, of which the following operating period will derive the benefit. In comparison with the other assets of the business deferred assets should be relatively small.

### CURRENT LIABILITIES

In regard to the liabilities of the business, the first item is usually accounts payable. Accounts payable which are secured should be shown under a separate heading. This is an item which is readily manipulated and liable at all times to be under-stated. In auditing the affairs of a concern it is one of the most difficult items to verify. The only way in which it can be done is by carefully examining all the assets, seeing from whom they were acquired, and then sending out letters to the different suppliers asking for statements of account. I remember an instance when called upon by the creditors to examine the condition of a company whose statement was handed to me showing accounts payable of about \$5,000. For the nature of the business it looked out of proportion. A careful inspection was made of the stock of merchandise on hand, ascertaining the suppliers of all large

quantities, and letters were sent to them requesting statements of account. When these statements were received and checked up it was found that the accounts payable were nearer \$75,000.00 than \$5,000.00.

Notes payable, like accounts payable, can be easily understated. In the balance-sheet or auditor's report it is best that notes payable to banks, to note brokers and to other creditors be shown separately. An important matter in examining this item is to ascertain whether or not any money has been borrowed by the proprietors or officers in the concern's name and turned over to the business with a credit to the capital account of the proprietor, instead of appearing as a liability of the business. I know of several instances within the past few years where notes have been given to banks for borrowed money in the name of the business, which were put into the business to the credit of the individual proprietor. Consequently, the financial statement, when prepared, did not show these liabilities. The auditor, who is familiar with this process, should carefully analyze the capital account as well as interest paid during the year and make a detailed analysis of how the different assets were acquired. If this is done he can be reasonably sure that his statement includes all the liabilities from this source.

Liabilities for payrolls and taxes, it should be remembered, are first lien on the assets, and in case these items are out of proportion, remember that they will be paid before anything else, perhaps leaving little for the unsecured, common creditors.

Amounts due employees, officers and relatives in some instances may be properly shown under a heading separate from current liabilities. Nevertheless, it should be distinctly kept in mind that, in case of financial difficulties, such accounts usually are paid before any others.

#### CONTINGENT LIABILITIES AND RESERVES

Full information should appear somewhere on the financial statement as to all possible contingent liabilities. We have already spoken of notes receivable rediscounted and accounts receivable sold. Accommodation endorsements have not infrequently been the cause of the failure of a prosperous business. Full inquiry should be made as to whether there are any such endorsements

## *Analysis of Financial Statements*

outstanding, as they may appear at any time and demand payment in full. Inquiry should also be made as to whether there are any suits, pending in the courts, or judgments, which might make a material difference in the financial position of the concern. With the new employees' liability law and other similar measures, it is possible for liabilities of this nature to arise at any time. Outstanding contracts, leases, moneys borrowed from members of family, etc., should be investigated to determine whether or not they have claims on the business. Special attention should be paid to reserve accounts. Reserve for depreciation should be deducted from the asset which it affects; reserves for taxes, for payrolls and for interest are not reserves, but accrued liabilities, and should show among the current liabilities. Reserves for bad debts, when appearing as a lump sum of say \$5,000.00 or \$10,000.00, should be closely investigated. Reserves for bad debts should not appear on the liability side of the balance-sheet, but be deducted directly from the accounts affected. In some instances an arbitrary amount set aside like this is not enough to cover the accounts which the proprietors know are worthless. It is only by a detailed inspection of each account individually that the amount necessary can be determined with any degree of accuracy. A reserve for contingencies is usually a part of the capital of the business, consisting of profits temporarily withheld.

### FIXED LIABILITIES

Fixed liabilities, such as long time bonds, should appear on the balance-sheet under a separate heading among the liabilities and not be deducted from the value of the assets against which they are liens. In the case of serial bonds, a certain amount of which fall due each year, the amounts falling due within a year of the date of the balance-sheet should be shown as current liabilities and not as fixed. Due caution should be exercised in ascertaining upon what assets the fixed liabilities, that is, the mortgages and bond issues, are liens. Occasionally they are first lien not only upon the real estate of the company, but upon all other assets, and in such cases this should plainly appear on the statement.

*The Journal of Accountancy*

CAPITAL OR NET WORTH

The important thing in analyzing net worth is first to see how the capital is invested and how it originated. Often the surplus of a concern is not real surplus, but a manipulation of the values of the fixed assets.

\* \* \* \* \*

PROFIT AND LOSS STATEMENT

The examination of the profit and loss statement is principally a matter of comparison, the object, of course, being to see whether the business is going forward or backward.

We have inspected each item in the balance-sheet; let us now go over the profit and loss statement in similar manner.

Below appears the analysis of profit and loss of A, B & Company:

ANALYSIS OF PROFIT AND LOSS—A, B & Co.

For twelve months ended June 30, 1916

Sales		500,000.00
Goods on hand first of year	60,000.00	
Goods purchased during year	415,000.00	
	<hr/>	
Total to be accounted for	475,000.00	
Inventory at close of year	75,000.00	
	<hr/>	
Balance—cost of goods sold		400,000.00
		<hr/>
Gross profit		100,000.00
EXPENSES:		
Rent	10,000.00	
Salaries	20,000.00	
Taxes	2,000.00	
Interest	4,000.00	
Miscellaneous	11,000.00	
	<hr/>	
Total expenses		47,000.00
		<hr/>
Operating profit for year		53,000.00

### *Analysis of Financial Statements*

**LESS:**

**SPECIAL DEDUCTIONS AND LOSSES:**

Bad debts	5,000.00
Fire loss	8,000.00
	13,000.00

**PLUS:**

**SPECIAL ADDITIONS:**

Profit on sale of real estate	10,000.00	3,000.00
	10,000.00	3,000.00
Net income for year		50,000.00

**PERCENTAGES:**

Gross profit	25%	on cost	20%	on sales
Expenses	11.75%	on cost	9.4%	on sales
Operating profit	13.25%	on cost	10.6%	on sales
Net profit	12.5%	on cost	10%	on sales

The profit and loss statement is usually divided into sales, less cost of sales, which gives the gross profit, less expenses, which leaves the operating profit; then special deductions and losses are taken off and special additions are added thereon, giving the net income for the year.

#### SALES

Comparison should be made with previous periods as to the volume of sales, and in well conducted businesses this should usually show an increase. Inquiry should be made as to whether or not there is included under the heading of sales goods sent out on consignment or goods shipped to subsidiary companies, branches or agencies. Such items are not sales, but part of the inventory until sold. The total sales should be compared with the inventory in order to get the number of times stock has been turned over during the period. The turnover, of course, varies with different businesses.

Sales should also be compared with accounts receivable, as this will show how fast the accounts are being liquidated, and also, in many instances, bring to light whether any accounts are included in accounts receivable not originating in sale of merchandise. From the total sales should be deducted full allowance for returnable packages, freights, discounts, etc.

## *The Journal of Accountancy*

### COST OF GOODS SOLD

The most approved manner of arriving at the cost of goods sold, whether for mercantile or manufacturing concerns, is as follows:

To the inventory of the goods on hand at the beginning of the year should be added the purchases of goods made during the year, or raw material plus cost of manufacture in case of manufacturing plants, plus any other direct charges, such as incoming freight, incoming drayage, etc. This gives the total goods to be accounted for. The inventory of goods on hand at the end of the year represents all goods which have not been sold, and is therefore deducted from the "total goods to be accounted for," leaving balance as cost of goods sold. This, when deducted from the total sales, gives the gross profit for the period. It is obvious, therefore, that the amount at which the inventories are valued to a great extent determines the profit for the period.

### EXPENSES

The expenses of the business should be carefully compared with the previous periods to see whether or not they have increased and whether or not the business is being managed economically. The item of interest should be carefully looked into as compared with the notes and accounts payable, as a check on the total outstanding. When miscellaneous expenses are shown at too large an amount, details should be required. Salaries of officers should be in proportion to the size of the business. When the total expenses are deducted from the gross profit, there then remains the operating profit for the year, from which should be deducted special deductions and losses.

### SPECIAL DEDUCTIONS AND LOSSES

All extraordinary losses, such as bad debts, fire losses, losses through damage suits, should be absorbed during the period in which they are discovered and not charged directly to surplus. When these items are charged directly to surplus, the profit and loss statement does not show the movement of the business from one balance-sheet to another as it should. The amount charged off on account of bad debts should receive due consideration as compared with the total sales.

## *Analysis of Financial Statements*

### SPECIAL ADDITIONS

All extraordinary profits, such as profits realized from the sale of capital assets, should appear in the profit and loss statement under this heading, and should be added to the operating profit for the year, producing the net income.

Somewhere in the profit and loss statement should appear a detailed statement of the percentages showing the gross profit based both on cost and on sales. Expenses, operating profit and net profit should be treated in the same manner. On account of the confusion in the minds of many as to whether percentages should be figured on sales or cost, it is usually best to figure them both ways.

The important thing in connection with the examination of the profit and loss statement is its comparison with previous periods and with the balance-sheet. The balance-sheet should always show the net income for past fiscal period, which should agree exactly with the analysis of profit and loss. The profit and loss statement shows the earning power of the business as an organization unit and, after all, the earning power is usually of more importance than the value of all the tangible assets.

As a supplement to these financial statements, there should always be available such information as the total amount of insurance carried on the fixed and current assets, the organization of the company, its history, etc.

In conclusion, it is my opinion that the enormous numbers of failures and losses sustained in this country each year are caused many times by the fact that proprietors or managers are guided, not by dishonest financial statements, but by erroneous ones, embarking on undertakings beyond their means of execution, not realizing their true financial condition until too late to retract. The public accountant, being skilled in the correct preparation and interpretation of the financial statement and accounts, has come to fill a distinct need in pointing out to the managers of business, to bankers and credit men such matters as we have discussed here.