

WHY DO I NEED FINANCIAL RECORDS?

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This publication has been developed by the Wisconsin SBDC in partnership with the U. S. Small Business Administration per agreement #00-7770-0056-17.

For many small business owners, the answer to this question is "for the IRS." While it is true that proper payment of income taxes depends on accurate records, the best reason to keep, understand, and use complete financial records is to help you better manage the growth and development of your business.

Types of Financial Records

What constitutes a complete set of financial records varies for any particular business. At a minimum, most businesses prepare, or have prepared for them, a ***Profit and Loss Statement*** and a ***Balance Sheet***. These are the basic financial statements which summarize all the accounts of a business. Much can be learned about a business from these two statements alone. These statements are common to all types of businesses. A discussion of both the profit and loss statement and the balance sheet appears below, including illustrations of each.

If your business offers credit to customers, you will need to maintain ledgers for ***Accounts Receivable***. If you purchase material or goods for production or resale, you will also need ledgers for ***Accounts Payable***. You will want to maintain an "aging" schedule of your accounts receivable in order to keep track of how long any particular customer has owed you money on account. You will want to maintain an aging schedule for accounts payable in order to insure that your bills are paid on time and that any applicable discounts are taken. Discounts are often offered by creditors to encourage early and prompt payment of invoices.

If your business manufactures goods for sale, you will also need to maintain ***cost accounting*** records. Such records include standard cost sheets, overhead application rates, bills of materials, and labor routings. In addition, many businesses maintain detailed records of inventory. ***Inventory records*** cover purchase costs, quantities brought in, and quantities used.

There are many other types of financial records a business may need. Significant examples are **Personnel and Payroll records**. There may also be financial records specially required by certain industries or because of the legal form of business organization you choose, such as incorporation. There is no absolute standard regulating which records any particular business must keep.

Recordkeeping is sometimes more of an art than a science. Good financial records, however, can greatly improve many of the management decisions a business owner must make, including decisions about marketing, personnel, borrowing, pricing, inventory, and product development. Almost every business decision may be improved through an analysis of financial records. This guide is designed to help you begin to learn how to use financial statements to make business decisions.

Analyzing the Profit and Loss Statement

Every business owner is interested in increasing profits. In order to do so effectively, you should consider many factors, including your marketing response to competition and reducing operating costs. One basic strategy for dealing with competitive pressure on profits is to emphasize in promotions (through advertising or telemarketing, for example) those products or services which have higher profit margins. How do you know which of your products/services has the highest profit margin? By reviewing your profit and loss statement!

Profit and loss statements, when properly prepared, will reveal how much the sales, cost of sales, gross margins, expenses, profits, and profit margins for a period have been. Profit margin is simply the net income (or less) divided by net sales. It is properly expressed as a percentage. Two good questions to ask at this point are:

- Where are net sales and net income figures found?
- How do I make practical use of the profit and loss statement?

In order to answer these questions, let's look more closely at a P & L statement. ***An illustrative P & L for a retail business, (Hal's Haberdashery), is attached (see Exhibit 1).***

There are four major figures on the statement for a manager to analyze. At the bottom of the statement, you will notice the line labeled "**Net Income or (Loss)**." This is the amount of money you report to the government on your tax forms. Since this number is the basis for determining the amount of tax owed, it is often calculated with an eye towards minimizing tax liability. That is why Net Income scrutinized alone is not necessarily a good indicator of the health of the business.

The next figure to consider is **Net Sales** of the business, found near the top of the statement. Net sales is all sales dollars that came into the business during the period, less any sales dollars that have been

returned to customers as the result of return or allowance policies. **Gross Sales** will equal net sales if your business does not have a returns policy, or your "product" cannot be returned. For example, a service cannot be returned. If your customers can return what they bought and get their money back, that money is not available for paying bills or other expenses, and therefore does not contribute to profit. If the **Returns and Allowances** figure becomes very large, it may begin to contribute to a loss. So the wise manager will keep close track of how the returns and allowance policies affect net sales.

A third important figure on the profit and loss statement for management focus is **Cost of Goods Sold** (sometimes reported as "Cost of Sales"). Many businesses hold an inventory of goods for sale or for use in production. Cost of goods sold is then calculated in a separate section of the P & L which begins with the dollar amount of inventory at the start of the period. **Net Purchases** are then added to that. Gross purchases are not added because goods may have been returned to vendors or may have been bought on allowance. Such goods are not available to add to the beginning stock of inventory. Finally, inventory still available for sale at the end of the period is subtracted out to determine the cost of the goods actually sold during the period.

Fourth, savvy managers will also keep a sharp eye on **Total Operating Expenses** and the figures that make up this total. In particular, managers should track any expenses which vary a great deal from period to period or which constitute a significant portion of total expenses. One way to quickly identify such expenses is to have your accountant or bookkeeper present the operating expenses section of the P & L in descending dollar order. Notice how easy it is for the proprietor of Hal's Haberdashery to see that rent and advertising constitute two of the store's three largest expenses for the year. Expressing each expense as a percentage of sales is part of an even more powerful method of financial statement analysis introduced below.

For firms with multiple product lines, aggregate profit and loss statements for the business as a whole reveal only the overall profit of the business. In order to figure the most profitable individual product line, you need a P & L for each product line. Since this is probably impractical for most small businesses, an estimate of sales and cost of goods sold for each product line can suffice. With those two figures, you can calculate gross profit margin by product line.

However, if you use gross margin alone to compare relative profitability of two product lines, you are not considering selling, and administrative expenses. If such expenses differ greatly by product line, then you should prepare more complete P & L statements. In general, using financial statements to increase profits is a matter of clearly understanding how particular revenues and expenses affect net profit.

Three Methods of Analysis

There are three additional ways to make use of your profit and loss statement for managerial decision making. One way is simply to compare the same line item figures on two or more statements. For example, compare the total spent on advertising this year versus last year. Or compare uncollectible accounts expense for the current quarter to this same quarter last year. Such comparisons are called **horizontal** or **trend analysis**. Financial statements can even be prepared specifically to facilitate comparison. For example, the proprietor at Mary's Mailing Services (see Exhibit 2), can easily compare last year's net sales to this year's net sales. Mary can easily calculate that revenues have increased more than \$14,000. This same process could be followed for any number of consecutive periods.

Very often the comparison is presented as a percentage change from one year to the next, as shown in Exhibit 2. Analysis of percentage change is generally more revealing than simply comparing raw dollar figures when attempting to identify potential problems. Percentage change allows a comparison relative to last year's performance.

At Mary's Mailing Services, for example, sales have increased 20.8% over last year, but net income has not kept pace, rising only 9.7%. This indicates that sales are being turned into profits less efficiently. The problem may be that Cost of Goods Sold rose more rapidly than sales. Cost of Goods Sold rose 30.6% from 1995 to 1996. Horizontal comparison using a relative percentage basis clearly indicates a deteriorating trend in the health of this business which could affect its long term existence.

A second method of analysis is called **common size analysis**. This is a means of comparing figures within a single P & L. A common size profit and loss statement, for example, compares all components of the P & L to gross sales. In other words, gross sales is defined as "100%" and all other figures on the statement are expressed as a percentage of gross sales. In this way, you not only get an automatic indication of approximate profit margin, you also can see the importance of all of your costs and expenses relative to sales.

An example of a common size profit and loss statement is shown in see Exhibit 1. Notice the percentage figures at the right hand margin. The "8.22" on the Net Income line indicates a profit margin of around 8%. The percentage on the Total Operating Expenses line reveals that it takes almost 25 cents out of every dollar in sales just to keep the doors open.

Horizontal analysis can also be done on these common size percentages in order to identify trends in the relative sizes of categories like costs, expenses, or margins. For example, at Hal's Haberdashery, the owner/manager should look at how each operating expense as a percentage of gross sales has changed over time.

A third means of finding additional meaning from your profit and loss statements is through the use of **ratio analysis**. Ratios are generally calculated by dividing one figure on the P & L by another. The profit margin, which divides net income by net sales, is one example of such a ratio. Ratio analysis is used to compare your business to industry standards. Industry standards are available through sources like the Robert Morris Associates' Annual Statement Studies. Such sources are available for review at libraries; perhaps your bank, and accounting firms are also likely to have ratio studies. Horizontal analysis can be done on the ratios. To fully explain the powerful potential of ratio analysis is beyond the scope of this guide. For additional assistance with ratio analysis, call the SBDC or check your local library for books on financial management.

Analyzing the Balance Sheet

Would you like to be able to calculate the amount of money your business has available to meet daily operating needs? Accountants call the funds available for use in a business its **Working Capital**. The amount of working capital available in your business can be found by looking at the balance sheet. The ability to read a balance sheet is crucial for good financial management. In order to learn how working capital can be calculated from the balance sheet, let's take a close look at the attached example of a comparative balance sheet for Dynachron Plastics Manufacturing Co. (see Exhibit 3).

Notice that there are three main sections to the balance sheet: **Assets, Liabilities, and Stockholders' Equity**. The reason it is called "stockholders' equity" is because Dynachron is a corporation and the owners of a corporation are its stockholders. A more general term for the equity section is simply "Owners' Equity." In general, assets are the things the company owns, liabilities are the claims on those assets held by banks or other creditors, and equity is the claim on assets held by the owners. The total assets should equal the combined total of liabilities and owner's equity. Dynachron's \$604,000 in liabilities plus its \$812,000 of equity equals the \$1,416,000 worth of assets in the firm. This balancing relationship is the basis for the term "balance sheet."

Now, if you look more closely at both the assets and liabilities sections, you will see that each is further categorized into "current" and "long term." Generally, current means within the current year. So, current assets are those things which could or will be converted to cash within one year. Current liabilities are those claims on assets held by creditors which will be paid within a year.

Calculating working capital is as simple as subtracting the total current liabilities from the total current assets. In other words, working capital is defined as the amount by which your current assets exceed your current liabilities. Dynachron's working capital at the end of 1996 was \$239,890, an increase of almost 39% over its 1995 year-end working capital of \$172,739. The amount of working capital available to a firm

is of considerable interest to managers (and potential lenders) because the greater the amount of working capital, the greater the assurance that funds will be available to meet short-term obligations.

There are a variety of other ratio measures using figures from the balance sheet, which are of interest to managers. For example, you hope to see positive equity; that is, total assets should be greater than total liabilities. The debt-to-equity ratio is simply total liabilities divided by owners' equity. This should normally be less than one. If the ratio is greater than one, it is an indication that creditors have more of a claim on the assets of the business than do the owners. Dynachron's 1996 debt-to-equity ratio is .74, a decrease of almost 13% from the 1995 debt-to-equity ratio. As with profit and loss statements, ratio analysis should be used to compare your performance with industry standards.

Further analysis of the balance sheet is possible using horizontal trend analysis and common size statements. Common size balance sheets generally express all items as a percent of total assets. Total assets is expressed as "100%" and all other figures are expressed as a percentage of this total assets figure. In [Exhibit 3](#), for example, you can see Dynachron's total liabilities are about 43% of total assets. In other words, if the business had to be liquidated today, creditors could lay claim to about 43% of the firm's assets and owners would retain about 57% of the assets. Again, for additional assistance in making use of these three powerful forms of analysis, call the SBDC or check your local library for books on financial management.

Cash Flow Planning

For a new business, a cash flow projection may be a better indicator of feasibility than projected profit and loss statements. This is because lack of cash kills new businesses as often as lack of profits. Maintaining and reviewing financial records for diagnostic purposes can help you predict the times when additional cash will be needed. For those times, special short term financing can be arranged in advance. Internal measures can also be taken to increase the cash flow.

Internal improvement of cash flow begins with a **Cash Flow Statement**. A cash flow statement is the most common planning tool for dealing with concerns about cash shortages. Some financial analysts even argue that this statement is more important than a profit and loss statement or a balance sheet. A cash flow statement tells you where cash is coming from, where it is going to, and when to expect additional inflows or outflows.

Preparing a cash flow statement is a matter of carefully considering only the actual cash transactions of the business. An example of the kinds of cash receipts (inflows) and cash disbursements (outflows) a business might have are listed in [Exhibit 4](#). The cash flow statement you prepare for use in your business

planning should contain the level of detail you need to control your business. If you have more than one line of business it may be necessary to have a series of cash flow statements, one for each line.

After you develop a cash flow statement, it can be used as a budget guide for the business. If you spend more or take in less than what was predicted by the budget, investigate and take remedial steps right away. Even if you take in more and spend less than expected, you still need to investigate. A bill might not have been paid or you may have discovered a more efficient way of operating which should be implemented as policy.

While the budget is a good long term planning tool, there are some short term strategies for improving cash flow as well. A typical source of cash flow problems is the Accounts Receivable (A/R) account. For businesses that offer sales on credit, receivables have great potential to create a major constriction in cash flow. Management of receivables is impossible without knowing exactly which accounts are past due, for how long, and how much they owe. All of these questions can be answered by maintaining and reviewing an accounts receivable aging summary.

The A/R aging summary provides a history of all your credit transactions with each of your customer accounts. The summary itemizes each transaction and "ages" it; that is, shows you how long it has been since a customer bought on credit. Because the summary does this for all your credit customers, it is possible to determine the total amount of receivables that are 30 days past due, 45 days past due, 60 days past due or more. By knowing who is past due and by how much, you can better allocate your time in pursuing collections. Keeping customers up to date on payments often provides an effective source of internal financing.

One measure of the effectiveness of your accounts receivable management is a calculated figure called **Accounts Receivable Turnover**. The turnover figure is calculated by dividing total credit sales for the period by average accounts receivable outstanding for the period. The number you get reveals how many times during the period you were able to turn receivables into sales dollars. By dividing the number of days in the period by this turnover number, you will have the **Days Sales Outstanding (DSO)** which indicates how many days it took to collect the average credit sale. A common rule of thumb is: if the DSO is more than one-and-a-half time your credit terms (for example, if your terms are net 30 and the DSO is 45 days or more), either your credit policy or your collections process or both are causing a constriction in your cash flow. An example of the DSO calculation for Dynachron is shown in [Exhibit 5](#).

The Need for a Financial Internal Control System

Even the most carefully prepared financial records are useless without an assurance that they accurately reflect actual transactions of the company. Many firms use a system of internal control in order to provide that assurance.

A well-designed **internal control system** will help safeguard assets and the reliability of financial records. Such controls are designed to provide reasonable assurance that transactions are recorded properly and that access to assets is restricted. The system should compare records to actual assets at reasonable intervals. Appropriate action can then be taken with respect to any differences.

For example, if your business employs a bookkeeper who writes business checks, someone else, perhaps the owner, should balance the bank statements. If one person other than the owner does both, there is the potential for checks being written to bogus creditors and covered in the bank statements. At the very least, if a bookkeeper is writing your checks, retain the authority to sign them so that each check, accompanied by the approved invoice, crosses your desk. The best financial statements in the world cannot prevent embezzlement without an accompanying internal control system.

Summary

Complete, accurate, and timely financial records are crucial to the survival and success of any business. Many business failures are directly related to conditions such as high operating expenses, excessive inventory, and deteriorating profits. Good records reveal such problems in time to take corrective action. No one can be absolutely sure what the future will bring, but past performance as revealed in financial records often provides a good indication of what to expect. Planning for the future is much more difficult in the absence of reasonable documentation about the past. The business owner needs good accounting records to make decisions based on factual information rather than guesswork. Analysis of financial records allows the business owner to monitor for daily flow of transactions, to catch shortages, discover trends, spot potential trouble areas, and to plan for the future.

Any opinions, findings and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. SMALL BUSINESS ADMINISTRATION.

>EXHIBIT 1
HAL'S HABERDASHERY
Profit and Loss Statement
For the Year Ended December 31, 19---

Operating Revenue		%
Sales	361,815	100.00

Less Sales Returns and Allowances		<u>6,513</u>	1.80
Net Sales		\$355,302	98.20

Cost of Goods Sold

Merchandise Inventory @ January 1		\$54,272	15.00
Purchases	\$249,652		69.00
Less:			
Purchases Returns/Allowances	\$4,523		
Purchases Discount	<u>\$9,045</u>	<u>\$13,568</u>	3.75
Net Purchases		<u>\$236,084</u>	65.25
Merchandise Available for Sale		\$290,356	
Less:			
Merchandise Inventory @ Dec. 31		<u>\$59,156</u>	16.35
Cost of Goods Sold		<u>\$231,200</u>	34.30
Gross Margin on Sales		<u>\$124,102</u>	

Operating Expenses

Salaries and Commissions Expense		\$38,352	10.60
Rent Expense		\$12,000	3.32
Advertising Expense		\$9,407	2.60
Bank Credit Card Expense		\$8,249	2.28
Uncollectable Accounts Expense		\$5,889	1.63
Payroll Taxes Expense		\$5,602	1.55
Heating and Electric Expense		\$1,924	0.53
Depreciation Expense		\$1,869	0.52
Telephone Expense		\$1,788	0.49

Supplies Expense	\$1,617	0.45
Insurance Expense	\$576	0.16
Miscellaneous Expense	<u>\$1,322</u>	0.37
Total Operating Expenses	<u>\$88,595</u>	24.49
Operating Income	\$35,507	9.81
Other Expenses		
Interest Expense	<u>\$5,750</u>	1.59
Net Income or (Loss)	\$29,757	8.22

EXHIBIT 2

MARY'S MAILING SERVICES

Comparative Profit and Loss Statement

For the Years ended December 31, 199__ and 199__

	<u>Year Ended</u> <u>Dec. 31, 199</u>	<u>Year Ended</u> <u>Dec. 31, 199</u>	<u>% of</u> <u>Change</u>
Net Sales	\$ 84,623	\$ 70,033	+ 20.8
Less Cost of Goods Sold	<u>\$ 49,283</u>	<u>\$ 37,742</u>	+ 30.6
Gross Margin on Sales	\$ 35,340	\$ 32,291	+ 9.4
General and Administrative Expenses	\$ 6,741	\$ 5,970	+ 12.9

Operating Expenses	<u>\$ 12,222</u>	<u>\$ 10,824</u>	+ 12.9
Operating Income	\$ 16,377	\$ 15,497	+ 5.7
<u>Other Revenue</u>			
Interest Income	\$ 836	\$ 795	+ 5.2
Rental Income	<u>\$ 3,600</u>	<u>\$ 3,300</u>	+ 9.1
	\$ 20,813	\$ 19,592	+ 6.2
<u>Other Expenses</u>			
Interest Expense	<u>\$ 2,750</u>	<u>\$ 3,125</u>	- 12.0
Earnings Before Income Tax	\$ 18,063	\$ 16,467	+ 9.7
Less Provision for Income Tax	<u>\$ 5,780</u>	<u>\$ 5,269</u>	+ 9.7
Net Income	<u>\$ 12,283</u>	<u>\$ 11,198</u>	+ 9.7

EXHIBIT 3

DYNACHRON PLASTICS MFG. CO.

Comparative Balance Sheet

December 31, 199__ and 199__

	Dec. 31, 199__	Dec. 31, 199__	%	%
			199__	199__
<u>ASSETS</u>				
Current Assets:				
Cash	\$ 18,377	\$ 22,861	1.3	1.7

Accounts Receivable, Net 1	\$ 256,021	\$ 194,355	18.1	14.6
Inventories				
Finished Goods	\$ 12,442	\$ 11,669		
Work in Process	\$ 191,609	\$ 149,008		
Materials	<u>\$15,488</u>	<u>\$8,615</u>	15.5	12.7
Total Current Assets	\$493,937	\$386,508	34.9	29.0

Long Term Assets:

Land	\$ 212,560	\$ 212,560	15.0	15.9
Building, Net 2	\$ 189,340	\$ 194,816	13.4	14.6
Factory Equipment, Net 2	\$ 509,763	\$ 527,808	36.0	39.6
Delivery Equipment, Net 2	\$ 8,640	\$ 9,450	0.6	0.7
Office Equipment, Net	<u>\$ 2,214</u>	<u>\$ 1,818</u>	0.2	0.1
Total Long-Term Assets	<u>\$922,517</u>	<u>\$946,452</u>	65.1	71.0

Total Assets	<u>\$1,416,454</u>	<u>\$1,332,906</u>	100.0	100.0
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LIABILITIES

Current Liabilities:

Notes Payable	\$ 100,000	\$ 100,000	7.1	7.5
Payroll Taxes Payable	\$ 14,809	\$ 13,263	1.0	1.0
Corporate Income Tax Payable	\$ 114,963	\$ 77,676	8.1	5.8
Accrued Interest Payable	\$ 7,475	\$ 8,280	0.5	0.6
Dividends Payable	<u>\$ 16,800</u>	<u>\$ 14,550</u>	1.2	1.1
Total Current Liabilities	\$ 254,047	\$ 213,769	17.9	16.0

Long-Term Liabilities

Bond Payable	<u>\$ 350,000</u>	<u>\$ 400,000</u>	24.7	30.0
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Total Liabilities	\$ 604,047	\$ 613,769	42.6	46.0
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STOCKHOLDERS' EQUITY

Capital Stock

(20,000 Shares Authorized, 15,000 Shares Issued)	\$ 525,000	\$ 525,000	37.1	39.4
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Retained Earnings	<u>\$287,407</u>	\$194,191	20.3	14.6
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Total Stockholders' Equity	\$ 812,407	\$719,191	57.4	54.0
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Total Liabilities and Stockholders' Equity	<u>\$1,416,454</u>	<u>\$1,332,960</u>		
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1 = Net of the Allowance for
Doubtful Accounts

2 = Net of Accumulated
Depreciation for Each Asset

EXHIBIT 4

Cash transactions for cash flow statement

- **Inflows**

- Sales revenue
- Add back depreciation
- Accounts receivable decrease
- Inventory decrease
- Prepaid expenses decrease
- Accounts Payable increase

Accrued expenses increase
 Long-term assets decrease
 Additional debt
 Interest income

• **Outflows**

Accounts receivable increase
 Inventory increase
 Prepaid expenses increase
 Accounts payable decrease
 Accrued expenses decrease
 Long-term assets increase
 Debt retirement
 Interest payment

EXHIBIT 5

DYNACHRON PLASTICS MFG. CO.

DSO Calculation

Year Ended December 31, 199_

1. Average A/R balance	A/R at beginning of year + A/R @ end of year Divided by 2
2. A/R Turnover	Credit Sales for the year Divided by Average A/R Balance (from above)
3. DSO=	360 Divided by A/R Turnover (from above)

1. Average A/R balance	$194,355 + 256,021 = 450,376 / 2 = 255,188$
2. A/R Turnover	$2,093,689 / 255,188 = 9.2975$
3. DSO=	$360 / 9.2975 = 38.72$ or approximately 39 days