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Rural Retailers: Financial Profile Of High-Profit, Medium-Profit And Low-Profit Firms
Michigan State University Agricultural Experiment Station and Cooperative Extension Service

Research Report

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RURAL RETAILERS

FINANCIAL PROFILE
of
HIGH-PROFIT,
MEDIUM-PROFIT
and
LOW-PROFIT
firms

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RURAL RETAILERS:

FINANCIAL PROFILE OF HIGH-, MEDIUM- AND LOW-PROFIT FIRMS

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As a small business owner, you may be afraid to know exactly where your business stands. But analyzing your company's financial ratios is a diagnostic procedure for your business. It's like having your blood pressure checked.

You should review your company's financial ratios at least annually. Why you? You are the best person to analyze your financial statements. You may rely on an accountant to keep the books in balance, but books will balance with red ink—they will even balance in bankruptcy court.¹ A successful business manager needs to keep the business in balance. Ironically, many business people get their most significant financial training in bankruptcy court, the equivalent of the emergency room in our health analogy.

Ratios can help an owner determine how his/her business is doing. Ratios can also be used to make projections for new businesses about how much money they will need to cover expenses. If you apply for a business loan from a bank or ask the Small Business Administration for backing for a loan, the loan officer will want to see projections of cash requirements. Likewise, banks use standard ratios to determine if a small business is reaching its potential and to identify potential problems.

Ratios are tools that can help answer some of the financial questions about your business, but they must be

interpreted with care. Ratios have relevance only in a comparative sense—you need to compare your company's figures with the figures of others within your industry. How comparable the other businesses are to yours will influence how helpful the ratios are.

This report presents information obtained from a 12-state study of rural retailers. Median figures are presented for each of the major categories. Figures obtained from Dun & Bradstreet (D & B) and the National Retail Federation (NRF) are presented for comparison. Figures from D & B and the NRF, however, are obtained from larger businesses located primarily in urban areas.^{2,3} The appendix of this workbook includes a chart of summary ratios from small businesses, but this information is more than 10 years old.

You'll learn the most about ratios and find this information more meaningful if you do the calculations for your own business. You can use your IRS form 1040, schedule C, to complete a profit and loss statement for your company. Next to each category we have specified the lines that relate to your 1040 schedule C. You will also need to construct a balance sheet. We've included a sample balance sheet and profit and loss statement that we will use to calculate ratios as we go along.

¹Miller, B.W., & Miller, D. E. (1991). *How to Interpret Financial Statements for Better Business Decisions*. American Management Association: New York.

²Industry Norms & Ratios—One Year Retailing (1991/92). Dun & Bradstreet Information Services. Dun & Bradstreet Business Credit Services.

³Financial & Operating Results of Retail Stores in 1991 (1992). National Retail Federation, New York.



SOME FINANCIAL DEFINITIONS

CAPITAL is any form of wealth used to create more wealth for the firm. It can be in many forms, including cash, inventory, store and equipment.

FINANCIAL LEVERAGE is the use of other people's money and is intended to help business owners boost the return on their own invested capital. For a small business, the use of financial leverage is good but it also can be risky.

FINANCIAL RISK is the risk posed by the heavy use of debt support by creditors to the business.

ASSETS are things the company owns that are of value. Assets may be **CURRENT** or **LONG-TERM**.

CURRENT ASSETS are very liquid, such as cash in checking and savings accounts, merchandise inventory, accounts receivable, short-term investments and any other near-cash assets. Some current assets are considered more liquid than others. Merchandise inventory is the least liquid of the current assets. The liquidity of accounts receivable depends largely on the collection record of the company.

LONG-TERM ASSETS or **FIXED ASSETS** are assets such as buildings, display and merchandise fixtures, equipment, vehicles, etc.

LIQUIDITY refers to how quickly assets can be turned into cash. A business may have a need for cash if debt obligations need to be met.

ACCOUNTS RECEIVABLE are sales that you have made on credit that have not been collected yet.

LIABILITIES (or DEBT) are what a company owes to others. Liabilities are classified as current or long-term.

CURRENT LIABILITIES include notes payable (due in one year or less), accounts payable (to vendors) and other debts that are due in one year or less.

LONG-TERM LIABILITIES are long-term debts such as mortgages, leases and other debts with terms of over one year.

NET WORTH is what is left over when **TOTAL LIABILITIES** are subtracted from **TOTAL ASSETS**. It is the owner's share of the business. Net worth is also called **OWNER'S EQUITY** or **EQUITY**.

EQUITY is the owner's interest in a business. Equity is also called **NET WORTH**.

WORKING CAPITAL is the capital used to support the business's normal short-term operation. It is what is left over when **CURRENT LIABILITIES** are subtracted from **CURRENT ASSETS**. Working capital is needed for daily business activities such as buying inventory, meeting payrolls and carrying accounts receivable. The amount of working capital needed by a business varies during the year.

GROSS SALES is the total of all merchandise and services sold over a particular period of time.

NET SALES is the actual dollar sales volume made by the store. It is the sales figure used in calculating ratios and is arrived at by subtracting merchandise returns, allowances to customers and sales discounts from the gross sales of the business.

COST OF SALES is the cost of the merchandise sold (**COST OF GOODS SOLD**). This figure is arrived at by calculating the cost of the merchandise, adding transportation and subtracting cash discounts received from suppliers.

GROSS MARGIN is the difference between the total **COST OF GOODS SOLD** and **NET SALES**. It is a type of profit. It is the profit before subtracting business expenses.

PROFIT is the amount remaining from sales after the **COST OF GOODS SOLD** and **EXPENSES** are subtracted.



THE BALANCE SHEET

The balance sheet is an accounting of a business's assets and liabilities at a particular point in time. The assets of the business are customarily listed first, either placed on the left-hand side or at the top of the balance sheet. Assets are listed in order of liquidity. Cash is the most liquid. Savings accounts and short-term investments are followed by inventory and accounts receivable to make up the current assets of the company. Non-current or long-term assets include items such as buildings, display and merchandise fixtures, equipment, vehicles and other items of that nature. These assets are called non-current or fixed because they usually cannot be converted into cash quickly. Assets are the resources of the business. The owner's effective management of these resources, as well as his/her effective merchandise management, is vital to the financial health of the business.

Liabilities, listed on the right-hand side of the balance sheet or directly below the assets, are also listed in order of their currency. Items that make up current liabilities (due in one year or less) include notes payable, accounts payable (to suppliers) and other liabilities that are due in the short term. Next, long-term liabilities such as mortgages, leases and other debt with terms of over one year are listed. The liabilities are then totaled.

The last item listed is the equity or net worth,

Balance Sheet — Example

Assets		
Current assets		
Short-term assets (cash in checking, savings accounts and short-term investment)	\$112,500	
Inventory	37,500	
Accounts receivable	<u>225,000</u>	
Total current assets		\$375,000
Long-term assets such as buildings, display and merchandise fixtures, equipment, vehicles, etc.		562,500
Other assets		<u>0</u>
Total assets		<u>\$937,500</u>
Liabilities and net worth		
Current liabilities		
Notes payable (due in one year or less)	\$103,125	
Accounts payable (to vendors)	46,875	
Other short-term liabilities	<u>37,500</u>	
Total short-term liabilities		\$187,500
Long-term debt (mortgages, leases and other debt with terms over one year)		300,000
Other debt not listed above		<u>0</u>
Total debt		\$487,500
Net worth		<u>450,000</u>
Total liabilities and net worth		<u>\$937,500</u>

the business owner's interest in the business. This is also listed on the right-hand side of the balance sheet, directly below the long-term liabilities. After the owner's equity is listed, both the net worth and total liabilities are totaled.

The basic accounting equation is:

FORMULA:	In our EXAMPLE:	YOUR COMPANY:
Total assets = Total liabilities + net worth	\$937,500 = 487,500 + 450,000	



Balance Sheet — Your Company

Assets

Current assets

Short-term assets (cash in checking,
savings accounts and short-term investment) \$ _____

Inventory _____ \$ _____

Accounts receivable \$ _____

Total current assets \$ _____

Long-term assets such as buildings, display and
merchandise fixtures, equipment, vehicles, etc. \$ _____

Other assets \$ _____

Total assets \$ _____

Liabilities and net worth

Current liabilities

Notes payable (due in one year or less) \$ _____

Accounts payable (to vendors) \$ _____

Other short-term liabilities \$ _____

Total short-term liabilities \$ _____

Long-term debt (mortgages, leases and
other debt with terms over one year) \$ _____

Other debt not listed above \$ _____

Total debt \$ _____

Net worth \$ _____

Total liabilities and net worth \$ _____



THE PROFIT AND LOSS STATEMENT (INCOME STATEMENT)

At the top of the income statement you will find sales. Sales are the primary source of the business's income. The business's sales should cover the cost of the merchandise being sold (COST OF GOODS SOLD) as well as all of the expenses of the business, including a reasonable wage for the owner. There are two major sections: the top relates to the cost of the merchandise; the bottom refers to the cost of selling the merchandise. The next major section of the income statement lists expenses. In our survey, we chose to classify expenses as they are classified on the 1040-C income tax form.

Profit and Loss Statement - Example

Net sales		\$375,000
Cost of goods sold:		
Inventory on hand, beginning of year	\$150,000	
Merchandise purchases during year	<u>337,500</u>	
Goods available for sale during year		\$487,500
Inventory on hand, end of the year		<u>200,000</u>
Total		<u>287,500</u>
Gross margin		\$87,500
Expenses		
Advertising	\$1,000	
Car & truck expense	400	
Commission for sales force	0	
Depreciation	7,000	
Employee benefit program	930	
Insurance (other than health)	2,300	
Interest	7,500	
Legal & professional services	600	
Store/office expenses, repairs & supplies	9,900	
Rent on business property	1,500	
Taxes	7,125	
Travel, meals & entertainment	700	
Store utilities and telephone	8,000	
Salaries and wages	30,000	
Owner's salary	<u>0</u>	
Total expenses		<u>76,955</u>
Profit		<u>\$10,545</u>



Profit and Loss Statement — Your Company

(Sched. C, I, line 3) **Net sales** \$ _____

(Part 1, line 4) **Cost of goods sold:**

Inventory on hand, beginning of year	\$ _____	
Merchandise purchases during year	\$ _____	
Goods available for sale during year		\$ _____
Inventory on hand, end of the year		\$ _____
Total		\$ _____

Gross margin \$ _____

Expenses

(line 8) Advertising	\$ _____	
(line 10) Car & truck expense	\$ _____	
(line 11) Commission for sales force	\$ _____	
(line 13) Depreciation	\$ _____	
(line 14) Employee benefit program	\$ _____	
(line 15) Insurance (other than health)	\$ _____	
(line 16 a&b) Interest	\$ _____	
(line 17) Legal & professional services	\$ _____	
(line 18, 21, 22) Store/office expenses, repairs & supplies	\$ _____	
(line 20 a&b)	\$ _____	
(line 23) Rent on business property	\$ _____	
(line 24d) Taxes	\$ _____	
(line 25) Travel, meals & entertainment	\$ _____	
(line 26) Store utilities and telephone	\$ _____	
Salaries and wages	\$ _____	
(line 28) Owner's salary		\$ _____
Total expenses		\$ _____
Profit		



Calculating Ratios

You will notice that our survey figures and our sample comparison figures are all in percentages. It is very difficult to find other businesses with exactly the same operating figures, but the income statement can be transformed into a comparative tool by calculating the percentage of gross receipts that each part represents. Using terms that you will find on your business's tax return enables you to find your comparable figures and make the appropriate calculations. With the expense figures, the expense item is divided by net sales. You will also

notice that the net profit figure can be a minus amount. This negative amount would indicate a net loss for the business.

In this paper, we have reported median figures for each of the low-profit, medium-profit and high-profit retailers. Median figures are the midpoint, not an arithmetic average that is distorted by excessively high or low figures. We have grouped the various business ratios into four categories: profitability ratios, liquidity ratios, efficiency ratios and operating ratios.

PROFITABILITY RATIOS

RETURN ON SALES OR NET PROFIT TO NET SALES

POPULAR NAMES: Profit margin on sales, return on sales ratio, net profit margin, profit percentage, the bottom line.

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Net profit}}{\text{Net sales}} \times 100$	$\frac{10,545}{375,000} \times 100 = 2.8\%$	_____ x 100 = %

RETURN ON SALES	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	- .47	6.40	17.37
Dun & Bradstreet			
Apparel	- 1.6	.8	2.3
Drug	.9	2.5	6.1
Florist	.4	2.3	9.4
Furniture	.3	2.8	7.4
Gift	.1	3.1	8.3

What it means:

This ratio measures the company's ability to make a profit on its average dollar sales. The ratio, expressed as a percentage, indicates the amount of each sales dollar that remains after all expenses and income taxes are deducted. Profits put back into the business give the company a greater opportunity for growth. The bigger the figure, the better.

In our study, the low-profit firms had a median profit figure of -.47 percent, the medium-profit firms had a profit of 6.4 percent and high-profit companies had a profit figure of 17.37 percent. The most profitable group of retailers in our study had the lowest sales volume (median = \$172,350). Retailers in the medium-profit group had the highest sales volume (\$350,000), followed by the low-profit firms (\$231,496).



RETURN ON ASSETS OR NET PROFIT TO TOTAL ASSETS

POPULAR NAME: Return on assets

How to calculate:	FORMULA:	EXAMPLE:	YOUR COMPANY:
	$\frac{\text{Net profit}}{\text{Total assets}} \times 100$	$\frac{10,545}{937,500} \times 100 = 1.1\%$	_____ x 100 = %

RETURN ON ASSETS	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	.1	15.3	13.1
Dun & Bradstreet			
Apparel	- 1.7	1.6	3.7
Drug	2.6	7.8	16.1
Florist	.3	4.2	12.4
Furniture	.3	4.7	11.2
Gift	.1	6.2	13.3

What it means:

This ratio, expressed as a percentage, measures a business's ability to produce profit on the assets it uses. The bigger the figure, the better.

Results from our study indicate that low-profit firms have a .1 median percent return on assets, compared with 15.3 percent for medium-profit companies and 34.7 percent for high-profit companies. These figures are much higher than the D & B figures. The Dun and Bradstreet profit figures do not include the owner's salary. The profit figure for these rural retailers may appear artificially high in relation to the assets. It is therefore more meaningful to compare the return on assets figures for high-, medium- and low-profit rural retailers than to compare with D & B figures.

Though it does not seem to be the case in this study, rural retailers do not always properly depreciate their assets. Leaving assets artificially high greatly distorts this ratio. To check for this, examine the inventory turnover ratio—if this ratio is low, you probably have a stale inventory. You should mark down merchandise to move it, then check current asset distribution. Inventory is the

generator of sales, so a significant proportion of your current assets should be there. Small businesses should avoid accounts receivable. It is expensive to administer your own store credit. We recommend accepting major credit cards and avoiding the expense of collecting on your own store credit.



RETURN ON NET WORTH OR NET PROFIT TO NET WORTH

POPULAR NAME: Return on equity

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Net profit}}{\text{Net worth}} \times 100$	$\frac{10,545}{450,000} \times 100 = 2.3\%$	$\text{_____} \times 100 = \text{ \%}$

RETURN ON NET WORTH	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	-.22	25.63	39.15
Dun & Bradstreet			
Apparel	- 3.8	2.9	7.3
Drug	5.5	14.5	33.0
Florist	.8	9.2	26.6
Furniture	.6	8.5	20.9
Gift	.6	12.0	32.3

What it means:

*This ratio measures the percentage of profit the owner realizes from his/her investment (the owner's equity) in the business. It measures the reward for assuming ownership risk in the business. The bigger the figure, the better. **This figure is the best measure of the return you as an owner are getting from the business. If this figure is less than what you could get from another investment with similar risk, you should reconsider why you are putting your time and money into this business.***

For this measure of profitability, again low-profit firms had a much lower median return on equity (-.22 percent) than did medium-profit (25.63 percent) or high-profit (39.15 percent) firms.

A variety of measures show that the low-profit firms did not perform well on any measure of profitability. Exploring other areas of a company's financial profile may indicate why.



LIQUIDITY RATIOS

CURRENT RATIO

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Total current assets}}{\text{Total current liabilities}}$	$\frac{375,000}{187,500} = 2$	$\text{-----} =$

CURRENT RATIO	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	2.85	4.03	4.28
Dun & Bradstreet			
Apparel	1.9	2.4	2.6
Drug	1.9	3.2	5.1
Florist	1.3	2.3	4.9
Furniture	1.8	3.2	6.9
Gift	1.6	3.1	7.9

What it means:

This ratio measures the margin of safety available should the value of any current assets shrink. It compares total current assets with total current liabilities; the more that current assets cover current liabilities, the more certainty there is that the current liabilities can be paid off. Generally, a 2 to 1 ratio (\$2 of current assets for every \$1 of current liabilities) is considered good (a comfortable cushion), depending on the nature of the business and the characteristics of its current assets and liabilities. In general, the higher a business's current ratio, the stronger its financial position. Some ways of increasing a current ratio are increasing current assets from loans with a maturity of more than one year and putting profit back into the business. Caution should be used if the current ratio is very high. Keeping excessive balances of idle cash, overinvesting in inventory or not depreciating inventory as it ages would produce a high current ratio, but this strategy may not utilize the business's assets in the most profitable way.

Results from our study indicate that all three groups of businesses—low, medium and high profitability—have adequate current ratios. The ratios range from 2.85 to 4.28, with the low-profit firms having the most risky financial position.



QUICK RATIO

POPULAR NAME: Acid test

ALSO KNOWN AS: Cash and short-term investments plus accounts receivable to current liabilities

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Cash + Accounts receivable}}{\text{Current liabilities}}$	$\frac{337,500}{187,500} = 1.8$	----- =

QUICK RATIO	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	.84	.86	1.40
Dun & Bradstreet			
Apparel	.2	.6	1.1
Drug	.5	1.0	1.9
Florist	.6	1.3	3.0
Furniture	.4	1.0	2.5
Gift	.3	3.8	1.8

What it means:

This ratio is a much more exacting (and conservative) measure than the current ratio in that it concentrates on really liquid assets (inventory is not included) whose value is fairly certain. It shows the number of cash and near-cash dollars—"quick funds"—available compared with the number of dollars of current debt. A ratio of 1 to 1 (\$1 to \$1) means that the numbers of cash and near-cash dollars available to pay off current debts and the total of current liabilities are about equal. That ratio is considered satisfactory. A 2 to 1 ratio means that there are twice as many dollars available as needed to cover the amount of debt and that the small business has more financial security. A quick ratio of less than 1 to 1 along with a current ratio of 2 to 1 would indicate that the business was dependent on inventory and future sales to cover short-term debt.

When inventory is subtracted from the current assets of the firms in our study, a very different financial picture emerges. The quick ratio for both the low-profit and medium-profit firms falls below the recommended guideline of 1 to 1. Only the high-profit firms remain liquid with a 1.40 quick ratio. This would indicate that inventory represents a much greater proportion of the low- and medium-profit firms' current assets than of the high-profit firms' assets. Check the inventory turnover ratio—if it also is low, you have evidence that your store inventory is old. Your best bet is to mark it down and get rid of it.



CURRENT LIABILITIES TO NET WORTH

POPULAR NAMES:

Current debt-to-equity ratio, current debt-to-net-worth ratio

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Current liabilities}}{\text{Net worth}} \times 100$	$\frac{187,500}{450,000} \times 100 = 41.7\%$	_____ X 100 = %

CURRENT LIABILITIES TO NET WORTH	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	19.31	23.33	12.52
Dun & Bradstreet			
Apparel	64.3	47.8	29.5
Drug	90.3	40.4	20.9
Florist	99.6	34.8	14.5
Furniture	95.5	38.9	13.4
Gift	108.3	42.8	11.7

What it means:

Comparing the funds that creditors are risking with the funds that are permanently invested by the business owner can indicate the degree of security for the creditors. The larger the liabilities compared with the net worth, the less security offered to the creditors. If you apply for a bank loan, the loan officer will cautiously consider this ratio.

It's not surprising that the high-profit firms had a lower percentage of funds supported by outside creditors. It is surprising that medium-profit companies had the highest figure (23.33 percent), nearly twice the amount of the high-profit companies and higher than the low-profit companies. Total liabilities to net worth presents the same type of distribution for our study. If total liabilities to net worth is low, you should try to shift some of your short-term debt to long-term debt. This will be possible if you have substantial investments in fixed assets such as a building.

Check the balance of current liabilities. If most of the current liabilities are accounts payable rather than short-term bank credit and if you are paying those accounts on time to take advantage of prompt payment discounts, you are using a very effective strategy—you are allowing suppliers to finance your inventory. However, never let your payment extend past the prompt payment deadline. Many people are not aware of the actual yield of a trade discount. Take, for instance, 2/10 net 30. The supplier offers a 2 percent discount if paid within 10 days. A 2 percent (2/10 net 30 terms) discount may seem insignificant, but when calculated as the equivalent annual interest rate, the rate is 36.5 percent.⁴ This means that the supplier is paying you 36 percent interest to pay your bill early. That is an extremely good rate of return on an investment. In industries such as women's and children's apparel, where the cash discount offered is 8 percent (8/10 net 30), the annual equivalent is 146 percent. The formula for calculating yield of a discount is:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Days in the year}}{\text{Net payment date} - \text{cash discount date}} \times \% \text{ discount}$	$\frac{365}{20} \times 2 = 36.5\%$	_____ X 2 = %

⁴Baumbach, Clifford. 1988. *How to Organize and Operate a Small Business*. Englewood Cliffs, New Jersey: Prentice Hall, p. 268.



TOTAL LIABILITIES TO NET WORTH

ALSO KNOWN AS: debt to net worth

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Total liabilities}}{\text{Net worth}} \times 100$	$\frac{487,500}{450,000} \times 100 = 108.3$	$\text{-----} \times 100 =$

TOTAL LIABILITIES TO NET WORTH	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
	Rural retailing study	27.27	50.00
Dun & Bradstreet			
Apparel	201.1	86.9	43.3
Drug	143.3	55.6	26.0
Florist	204.7	64.0	23.2
Furniture	143.6	57.9	20.5
Gift	187.8	73.7	18.3



EFFICIENCY RATIOS

INVENTORY TURN RATIO OR NET SALES TO INVENTORY

How to calculate:

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Net sales}}{\frac{\text{Opening inventory} + \text{closing inventory}}{2}}$	$\frac{375,000}{\frac{150,000 + 200,000}{2}} = 2.14$	$\frac{\text{-----}}{2} = \text{-----}$

NET SALES TO INVENTORY	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	2.86	3.24	2.89
Dun & Bradstreet			
Apparel	4.9	5.7	7.4
Drug	5.9	7.6	10.4
Florist	10.5	16.7	31.2
Furniture	3.1	4.3	6.5
Gift	2.7	3.8	5.4

This measure tells how often your inventory flows through the store. If your inventory is on an average day valued at \$200,000 (at retail) and you have annual sales of \$1,000,000, your store's inventory turnover would be 5. Average inventory at retail is calculated by adding the beginning (or opening) inventory at retail to the ending (or closing) inventory at retail and dividing by 2. The average inventory at cost is calculated by adding the beginning inventory at cost to the ending inventory at cost and dividing by 2. Either way of calculating is accurate as long as you use either retail figures or cost figures. If you use retail figures, you divide the average inventory into net sales. If you use cost figures, you divide the average inventory into COST OF GOODS SOLD. Mixing retail and cost figures in these calculations will result in inaccurate and misleading ratios.

What it means:

This ratio indicates how fast the inventory is moving through the store—how many times the inventory is completely replaced in a year. It measures the company's control of inventory in relation to sales. A high turnover means that the company was able to operate with a relatively small investment in inventory. A high turnover suggests that inventory has not been on the shelves too long and is more current and salable. If inventory turnover is too high, however, merchandise stockouts occur. Such stockouts can not only raise customer dissatisfaction levels but also lose customers. This can be particularly devastating to a small business—customers may not return if their merchandise needs were not met on an initial visit. In addition to comparing turnover rates in similar businesses, a business's past experience can also serve as a guide. If inventories and sales are rising, then the turnover will remain the same or improve. If inventories are growing proportionately faster than sales, a declining turnover rate will alert a small business owner that trouble may be developing.

The inventory turnover rate was quite similar for the three groups in our study. The rate, however, was very low when compared with Dun & Bradstreet figures.



NET SALES TO WORKING CAPITAL

ALSO KNOWN AS: Turnover of working capital

How to calculate:

FORMULA :	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Net sales}}{\text{Working capital}}$	$\frac{375,000}{375,000 - 187,500} = 2$	----- =

SALES TO WORKING CAPITAL	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	3.68	3.32	3.53
Dun & Bradstreet			
Apparel	4.9	6.0	8.5
Drug	4.7	6.7	10.3
Florist	4.5	8.7	19.0
Furniture	2.4	4.2	7.7
Gift	2.5	4.0	7.9

What it means:

This ratio measures the dollars in sales generated for every dollar of working capital (current assets minus current liabilities). It tells the business owner(s) how efficiently working capital is being used to generate sales. A low ratio may indicate that the small business is not using its working capital efficiently or profitably. A very high ratio would indicate a level of working capital that is not adequate to maintain the level of sales. This ratio helps to identify the level of working capital necessary to support higher sales volume.

Small businesses are often cash-starved. They are tempted to sacrifice profitability to generate cash flow. Have you ever found yourself taking a markdown on a big-ticket item, not because it is stale but because you need to pay a bill? Most likely your turnover of working capital was high. There was not much difference in the turnover in working capital for the three groups of businesses in our study. Figures ranged from 3.32 to 3.68. The D & B figures are much higher.



EXPENSE RATIOS OR OPERATING RATIOS

FORMULA:	EXAMPLE :	YOUR COMPANY :
$\frac{\text{Total expenses}}{\text{Net sales}} \times 100$	$\frac{76,955}{375,000} \times 100 = 20.5\%$	$\text{-----} \times 100 = \text{ \%}$

TOTAL EXPENSES	LOW PROFIT	MEDIUM PROFIT	HIGH PROFIT
Rural retailing study	32.50	28.94	22.53

What it means:

This ratio compares all expenses to net sales for the small business. It gives the business owner(s) a measure of the total expenses of the business. A breakdown by specific expenses follows. Comparing total as well as specific expenses with figures from other similar small businesses can aid the owner/manager in establishing expense guidelines that will improve the business's control of excessive expense spending.

Expenses as a percentage of sales were much higher for low-profit businesses (mean=32.50 percent) in our study than for high-profit firms (22.53 percent).

The calculation of the following expense ratios can be handled in a similar manner. Here is the formula and an example using the advertising expense.

FORMULA:	EXAMPLE:	YOUR COMPANY:
$\frac{\text{Specific expense (e.g., advertising)}}{\text{Gross receipts}} \times 100$	$\frac{1,000}{375,000} \times 100 = .27\%$	$\text{-----} \times 100 = \text{ \%}$

Some of the key expense categories will be discussed.



RATIOS	Rural retailing study results			FOR specialty stores, 1991	
	LOW PROFIT (median)	MEDIUM PROFIT (median)	HIGH PROFIT (median)	Median	<\$5M Middle Range
Operating Sales Cost of goods sold	100 69.49	100 64.35	100 56.16		
Gross margin	30.51	35.65	43.84		
Total expenses	32.50	28.94	22.53	44.14	39.12
Advertising/promotion	1.50	2.06	1.38	3.20	50.32
Car/truck	.83	.63	.60		1.89-3.62
Commission for sales force	.00	.00	.00		
Depreciation	1.68	.85	1.13	1.16	.69-1.89
Employee benefits	.00	.00	.00		
Insurance	1.08	.88	.95	.73	.23-2.32
Interest	.75	1.39	.16		
Legal/professional	.25	.21	.25		
Store/office supplies	1.68	1.16	1.01	1.82	.00-3.40
Rent on business property	.33	1.61	1.40	5.60	.00-8.80
Taxes	1.19	.93	.54	.88	.00-2.68
Travel/meals	.09	.11	.06	.70	.00-1.05
Salaries/wages	9.08	9.75	5.83	12.54	4.23-20.22
Store utilities	1.80	1.61	1.72		
Other expenses	1.90	1.22	1.30		
Net profit	-.47	6.40	17.37	-2.69	-5.87-5.54

ADVERTISING/PROMOTION TO GROSS RECEIPTS

Expenditures for advertising can be interrelated with other expenses. For instance, an excellent store location could result in a great deal of traffic, eliminating the need for advertising. A rule of thumb used to be that advertising plus rent should equal 10 percent of sales. In the standard figures given by the FOR, the percent for advertising (3.20) plus the percent given for rent (5.60) does equal close to 10 percent. Figures are very different for the rural businesses in our study, however. High-profit firms spent a smaller percentage on advertising (1.38) than did low-profit firms (1.50). The firms in the middle spent the most for advertising (2.06 percent). These figures are much smaller than the FOR figures. It may be that advertising in smaller communities is less costly, though it also appears that expenditures for advertising do not substantially improve the bottom line.

When combined with the rent ratio, the figures for high-profit firms in rural communities equal just 3 percent.

DEPRECIATION TO GROSS RECEIPTS

Medium-profit businesses had a lower depreciation expense (.85) than low- (1.68) or high-profit (1.13) companies. This could be interpreted in several ways. Businesses in rural areas may have to be more speculative in inventory and as a result of this speculation be forced to depreciate at a higher rate. Fixed assets such as equipment and buildings are also depreciated. The high depreciation rate for lower-profit businesses may indicate that the businesses are overextended in fixed assets, which are big-ticket items that do not generate revenues. An important strategy for all businesses, but particularly small businesses, is to curtail fixed assets as much as possible, choosing instead to put the money into current assets that are directly responsible for generating income.

⁵Financial & Operating Results of Retail Stores in 1991. John A. Ronzetti, ed. 1992. New York: National Retail Federation



INTEREST (MORTGAGE AND OTHER) TO GROSS RECEIPTS

Interest expense is an indication of how much debt is costing the company. In our study, low-profit businesses had four times the interest expense that high-profit firms had. The firms in the middle, however, paid the most for interest. It may be that the low-profit firms were forced to take short-term loans with higher interest rates than more profitable businesses enjoyed.

STORE/OFFICE EXPENSES, REPAIRS AND SUPPLIES TO GROSS RECEIPTS

Items included in this category often are not apparent to customers, so these types of expenses need to be minimized. Top-of-the-line supplies and services for the business may be nice, but they may draw too heavily on the business's financial resources. Less profitable firms spent more in this category than more profitable companies in our study. Low-profit firms spent more on this expense (1.68 percent) than medium- (1.16 percent) or high-profit firms (1.01 percent).

RENT ON BUSINESS PROPERTY TO GROSS RECEIPTS

Rental expenses need to be looked at very carefully. A "bargain" location may not be such a deal when other expenses are analyzed. If the business is in an out-of-the-way location and additional advertising is needed just to help customers find the business, then the additional advertising expense needs to be considered in the evaluation of this expense. Mall locations can be even more expensive than they appear at first. Charges will include a square footage fee in addition to a percentage of sales and a percentage of expenses that the mall incurs (called common area maintenance or CAM), such as interior maintenance, security, parking lot maintenance and mall advertising. In our study, rural retailers paid very little for rent—less than half the figure given in the FOR. The low-profit firms paid the least amount for rent, less than 1 percent of sales.

TAXES

This figure does not refer to the taxes you may pay on your profit, but rather taxes you pay on things such as real estate. In our study, the low-profit businesses paid twice the amount of taxes (1.19 percent) as did the high-profit retailers (.54 percent). This figure, combined with the very low figure given by the low-profit firms for rent expenses, suggests that the low-profit firms are purchasing their buildings rather than renting facilities. Tying up money in excessive fixed assets is not desirable because fixed assets do not generate returns.

SALARIES/WAGES TO GROSS RECEIPTS

Salaries and wages make up a major component of a business's expenses. For a small business, individual employees have a big impact on the success of the business. If customers encounter an unhelpful employee in a large store, they are not likely to label the store by that single employee, but in a small business, the single encounter defines service level. Small businesses cannot expect to compete on price—their competitive weapon is in unique products and outstanding service. In our study, low-profit firms paid more in salaries (9.08 percent) than did high-profit firms (5.83 percent).

OWNER'S SALARY or PROPRIETOR'S WAGE

It is a good idea to formally pay yourself a salary. Your salary as the owner/manager should not be included under the wage/salary category—that is for employees only. Your salary should be included under a separate title, proprietor's wage or owner's salary. In our study, when we computed profit, we added the proprietor's wage to the profit figure, putting all the businesses on the same level. Otherwise, those business owners who formally paid themselves a salary would look less profitable.

Owners of low-profit businesses paid themselves a mean salary of \$22,000. This is less than the medium-profit companies (\$25,000) but more than the high-profit businesses (\$18,975).



S U M M A R Y C H A R T

	CONCLUSION	
PROFITABILITY	LOW FIGURE	HIGH FIGURE
Net profit to sales	Sales too low, expenses too high. Examine operating ratios to find the problem.	Excellent. The bigger, the better.
Net profit to total assets	If previous ratio is on target, check to make sure assets are being properly depreciated. Check inventory turns—it may be that your asset distribution is not good: too much money in cash and not enough in inventory to generate sales. Inventory is the working asset for a retailer.	Excellent. The bigger, the better.
Net profit to net worth	If this figure is low, you should consider putting your assets to use in another way—i.e., sell the business and invest the assets elsewhere	Excellent. The bigger, the better.
LIQUIDITY RATIOS		
Current ratio	Will be difficult to meet payments. May be difficult to get short-term credit.	Generally good. However, it could mean that you are holding idle cash or maintaining excessive inventory. To check for this problem, check the quick ratio.
Quick ratio	Overly dependent on inventory to satisfy short-term debt. Risky financial picture. Check inventory turnover ratio—if it is also low, aggressively mark down inventory to get it moving.	Good liquidity, financial security.
Current liabilities to net worth	Good—you are not ruled by creditors.	Limits operating freedom. Try shifting to long-term debt (bank loan) using your building as collateral. Consider equity financing—i.e., acquire a partner.
Total liabilities to net worth	Good—you have financial security. Good candidate for loans.	Will be difficult to get additional credit.
EFFICIENCY RATIOS		
Inventory turn ratio	Too big an inventory. Slow-moving merchandise (old dogs).	Too small an inventory. Stockouts.
Net sales to working capital	You are not using your working capital efficiently.	Too little working capital. This makes creditors vulnerable.



BUSINESS MYTHS

Once we thought head colds came from exposure to weather contrasts—now we know they are caused by a virus. Myths die hard—we like to believe things our mothers taught us. Results of this study contradict beliefs we have long held about business, particularly rural retail businesses.

MYTH # 1 . RURAL RETAILERS ARE NOT PROFITABLE.

High-profit retailers in our study reported a profit of more than 17 percent. This is higher than high-profit retailers reported in Dun and Bradstreet and other sources of financial standards. This is an excellent profit return for a business.

MYTH # 2 . BIG IS BETTER—OR, AT LEAST, MORE PROFITABLE.

High-profit retailers had the lowest sales volume of the three groups. Small businesses are more flexible, able to react quickly to changes in the competitive environment. A small business is to a big business as a mouse is to an elephant. The elephant can sit anywhere in the room he wants, but there will be plenty of corners for the mouse—he just must be prepared to relocate when the elephant moves.

MYTH # 3 . IT PAYS TO ADVERTISE.

All categories of retailers paid a very small percentage of sales on advertising. The most profitable businesses paid the least.

MYTH # 4 . HIGH INVENTORY TURNS LEAD TO PROFITABILITY.

The most profitable retailers did not have a higher inventory turn than the least profitable retailers. The turns for rural retailers were lower

than those for any categories of retailers presented in Dun and Bradstreet. High-profit retailers in our study had an inventory turn of less than 3. High-profit apparel retailers reported in Dun and Bradstreet had an inventory turn of 7.4; gift stores had a turn of 5.4.

MYTH # 5 . PROFITABLE FIRMS USE OTHER PEOPLE'S MONEY.

Two ratios, current liabilities to net worth and total liabilities to net worth, show that high-profit firms are not “borrowed up”—they have the lowest figures for these ratios. In addition, the interest expense paid by high-profit firms was lower than the interest expense of low- or medium-profit firms.

MYTH # 6 . LOCATION, LOCATION, LOCATION.

Rural retailers paid less than one-fourth the amount of rent that urban retailers paid. High-profit retailers in our study paid less for rent than medium-profit retailers.

MYTH # 7 . ALL SMALL BUSINESSES ARE CASH-POOR.

Liquidity, as measured by the current ratio and the quick ratio, indicates that these rural retailers are not cash-poor. Even when inventory is removed from the equation (quick ratio), the high-profit firms remained at the 1 to 1 ratio, indicating adequate ability to meet financial obligations.

MYTH # 8 . IT IS MORE EXPENSIVE TO RUN A SMALL BUSINESS THAN A BIG BUSINESS.

The rural retailers in all three of the categories had lower total expenses (high-profit = 22.53 percent; medium-profit = 28.94 percent; low-profit = 32.50 percent) than did the urban retailers reported in FOR (41.40 percent).

MYTH # 9 . YOU HAVE TO DISCOUNT TO BE PROFITABLE.

The high-profit retailers in our study had a gross margin of 43.84 percent. This is a high markup. The least profitable firms in our study had the lowest markup (30.51 percent). Small businesses can not compete on price—they should not even attempt to go head-to-head with price competition. Instead, the small business's edge is a combination of flexibility, unique merchandise and superb customer service.



APPENDIX

RESEARCH DETAILS

THE SURVEY

The survey was developed by researchers from 12 universities to identify successful small rural retailers and identify characteristics that they had in common. A telephone survey was completed by 1,048 of the 2,004 rural retailers contacted. Those 1,048 retailers were sent a follow-up questionnaire by mail. Of those, 459 returned their completed questionnaires. The survey respondents included rural retailers from Iowa, Illinois, Indiana, Kansas, Louisiana, Michigan, Nebraska, North Dakota, Ohio, Oklahoma, Wisconsin and Wyoming. Store types included apparel and accessory stores, drug stores, florists, furniture stores, gift stores and hardware stores. The survey results included in this publication came from the mail survey.

CHARACTERISTICS OF THE AVERAGE SMALL RURAL RETAILER

Over 65 percent of the respondents indicated that they made a profit in 1991; nearly 20 percent indicated that they lost money during that year. Nearly 36 percent indicated that their profit decreased from 1990 to 1991; 51 percent indicated that their profit increased during this time period. An even larger percentage (59.5 percent) indicated that their sales increased during the time period.

The largest percentage of the businesses were furniture stores (12.5 percent), followed by hardware (11.8 percent), gifts (9.2 percent) and apparel (7 percent). Nearly half were sole proprietorships and 87 percent were locally owned. Nearly 36 percent of the operators had college degrees. Most of the operators were between 30 and 59 years old.

In the survey, the average small rural retail store owner/manager was a 47-year-old male with some college, university or other training after high school. The stores had been in business for an average of 27 years, and the person responding had owned or managed the store an average of 12 years. The profit for these companies ranged from a loss of 22.57 percent to a profit of 72.30 percent. Based on the profit the retailer made, the retailers were classified into three groups: high-profit (over 11.43 percent); medium-profit (2.66 to 11.43 percent) and low-profit (under 2.66 percent).

SELECTED RATIOS FOR PROFITABLE SMALL BUSINESSES⁵

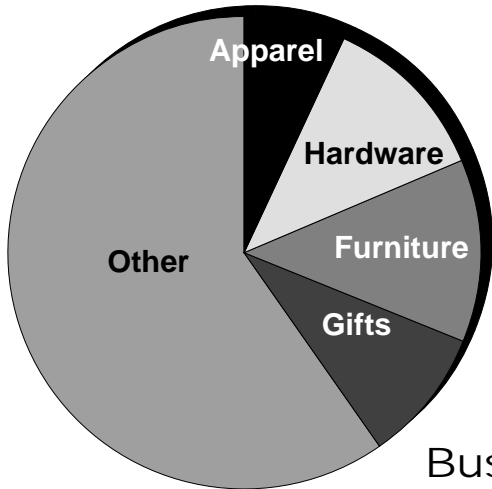
	CURRENT RATIO	QUICK RATIO	CURRENT LIABILITY TO NW	TOTAL LIABILITY TO NW	SALES TO INVENTORY	RETURN ON ASSETS	RETURN ON NW	COST OF GOODS SOLD	GROSS MARGIN	LABOR (SALARIES AND WAGES)	RENT	ADVERTISING
APPAREL	4.9	1.7	23.7	26.9	3.8	30.8	42.1	60.88	39.12	6.94	3.10	1.50
DRUG	3.0	.9	44.1	74.2	5.9	32.0	60.9	65.43	34.57	5.76	2.41	.86
FLORIST	4.7	4.1	9.6	16.7	20.2	42.4	53.8	35.96	64.04	18.98	3.04	1.18
FURNITURE	3.4	.8	29.5	67.7	3.9	23.8	45.4	58.70	41.30	5.36	2.71	2.14

⁵Financial Studies of the Small Business—Seventh Edition (1984). "25% Most Profitable". Winter Haven, Fla.: Financial Research Associates.

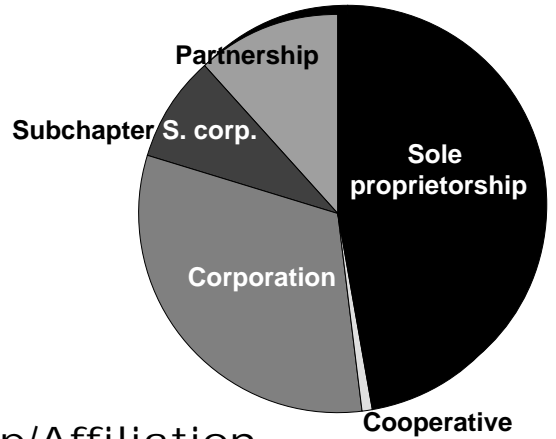


SELECTED CHARACTERISTICS OF RETAIL

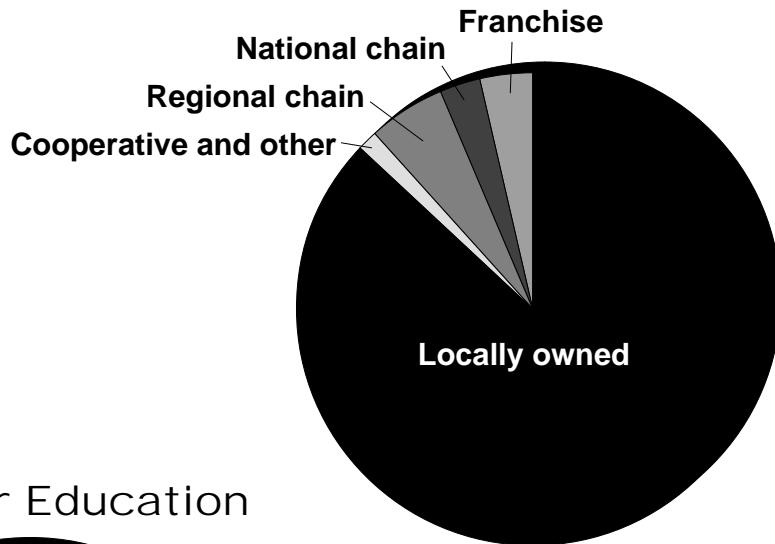
Type of Business



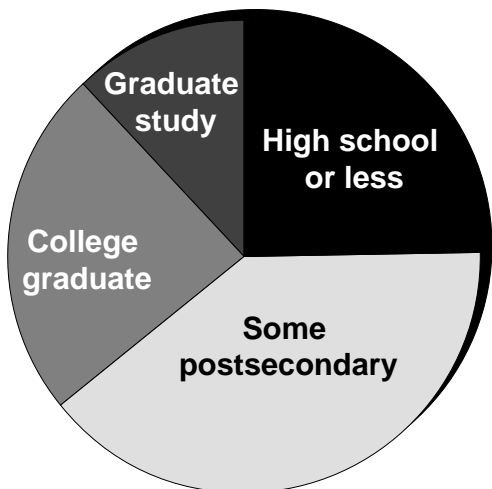
Business Organization



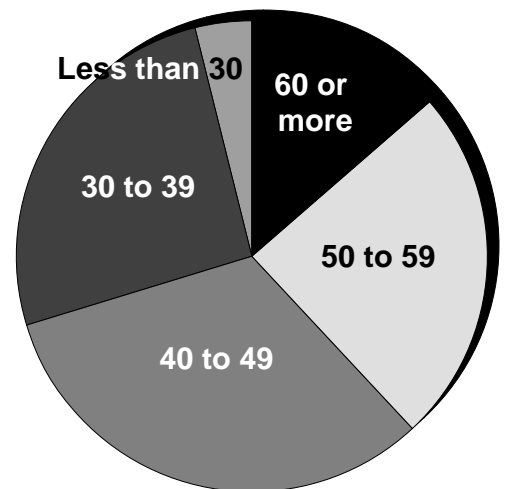
Business Ownership/Affiliation



Operator Education



Operator Age





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