National Marine Financial Data Bank

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$3.00

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P1053 1/88 250

The University of Rhode Island
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ACKNOWLEDGEMENTS

Although the author is responsible for any errors of commission or omission in this report, the combined efforts of many people helped complete this extremely complex study. In a survey of this sort, a team of hard working students typically provides the essential labor. In this case, much of the primary data was organized by Onita Munshi and Steve Anderson, MBA candidates at the time, who also wrote the initial computer program to tabulate results. Contact with respondents during the survey process was handled by Bonnie Erickson, also an MBA candidate at the time, who doubled as the project's "sparkplug" for about one year. More recently Rick Egan and Richard Mitchell worked on preparing the final data tables, a process that has lasted for about one year. At URI's College of Business Administration, Cathy McGovern and Sue Kilgore kept the report production on track through many interruptions and diversions. The Rhode Island Sea Grant Marine Advisory Service's Neil Ross (now President of International Marina Institute, Inc.) provided invaluable guidance and advice and an awful lot of "words" in support of this effort. Finally, I must thank Sara Hickox, formerly with URI's Rhode Island Sea Grant Marine Advisory Service and now Associate Director of Marine Affairs, for talking me into attempting this project in the first place. Sara put all the pieces together and prodded all of us along over the three years it took to reach the final report stage. Her friendship and leadership have benefitted all of us.

The full cooperation of participating business people has been essential to the project's completion. Although they must remain unidentified, their courage in providing confidential data and their interest in improving financial management in their industries are gratefully acknowledged.

A special thanks is owed to all the people affiliated with the National and Rhode Island Sea Grant Programs for the financial and moral support that made the study and this publication possible.

SECTION 1: INTRODUCTION

This report presents results of the URI National Marine Financial Data Bank (the Data Bank) which, at this writing, consists of about 400 separate pieces of mainly financial information for which primary data was developed around 61 financial and 26 descriptive data points, on nearly 130 marine related businesses. The project was a joint undertaking between the URI College of Business Administration and the Rhode Island Sea Grant Marine Advisory Service and has been underway for two years. The first set of interim results was made available at the week long 1986 URI Marine/Boatyard Management Seminar, held in March 1986. Final results (those contained in this report) were initially presented at the International Marina Institute's (IMI) four-day seminar, "Buying and Managing A Profitable Marina and Boatyard," which was held in Providence, Rhode Island on August 3-7, 1986.

The impetus for the study came from requests by marina and boatyard owners and operators and financial institutions to replicate our 1979 study (described below). Through our financial management workshops and consulting relationships, we have had extensive contact over the years with marine business people who have verified the need for up-to-date industry financial information with which to evaluate their firms' financial health. Also, marine business operators, prospective buyers, financial institution representatives, waterfront developers, and others, have asked for comprehensive income statement and balance sheet spread data for the preparation of pro forma financial statements.

Three sections make up the balance of this report. The content of the data bank and the methodology used in the study are described in Section 2 and a brief tutorial on the use of financial ratio analysis makes up Section 3. The tables of financial and descriptive data are contained in Section 4.

Why Gather Financial Data on Marine Businesses?

To determine the financial health of a business, managers compare their firm's financial ratios--one financial account value divided by another--with those of similar organizations. Sources of annual industry average financial data are readily available for such purposes for many kinds of businesses. Most popular among these sources are Robert Morris Associate's Annual Statement Studies, Dunn & Bradstreet's Key Business Ratios, and the Troy Almanac. The "averages" reported are usually quartiles, with medians drawing the most attention, and the typical source reports a set of them for hundreds of different types of businesses.

The problem is that financial data on marine businesses such as marinas and boatyards is not reported separately in the more accessible sources. This is due largely to the relatively small numbers of them around the country. Some types of businesses, coastal marinas in particular, are included in several of the sources, but they are lumped together in the same category as landlocked boat dealers with no slip or mooring rental facilities. The

peculiar asset structure of coastal marinas is lost in the overwhelmingly retail nature of the boat dealer category. Therefore, when one computes the financial ratios for a healthy marina and then compares them to boat dealer ratios in one of the industry average references, the marina comes out looking confusing at best.

The URI National Marine Financial Data Bank is an attempt to remedy this situation by gathering, tabulating and promulgating industry average financial data for several types of marine businesses. The major industries we have targeted are marinas, boatyards, marina-boatyard combinations, and boat dealers.

How the Data Bank was Begun

To our knowledge only two previous attempts have been made to provide industry average financial ratios and spread sheets for any type of marine-related business. The first was funded by the Rhode Island Sea Grant College Program and published in 1979 by the URI Marine Advisory Service (MAS)--Callaghan, Comerford, and Schwarzbach, "Coastal Marina and Boatyard Financial Structure and Performance in Southern New England"—and soon became the industry standard for the northeast.

It was replicated, also with Sea Grant funding, by a team of researchers in Florida and published in 1983 (Milon, Wilknowske, and Brinkman). The sample of respondents for this work consisted of Florida marinas and boatyards. The results apply reasonably well to firms in all southeastern states that enjoy a 12 month boating season just as the URI study applies to states with about a 6 month season.

In addition to managers of marinas and boatyards, banks, insurance companies, marina/boatyard suppliers, and the Small Business Administration began to use these studies as their sources of standard performance data. Before they were published, marinas and boatyards were regarded as mysterious cottage businesses and, therefore, as risky loan recipients. Many financial institutions often chose to (1) steer clear of commercial loans to marine businesses or (2) treat some of them as equivalent to marginally related businesses such as automobile dealerships or hardware stores. This led to either restrictions on available capital or unreasonably conservative loan terms. With this data, though, a financial analyst or loan officer, with little or no experience with marine related businesses, could see what a "typical" one looks like and be less apprehensive about the financial relationship.

Both earlier studies suffer from three shortcomings that increasingly have made them less reliable. First, because length of season materially affects financial structure, the two sets of standard financial information could not reliably be applied to firms in other geographical regions with different seasons. Second, both studies are geographically bound by certain attributes that are peculiar to their regions. For example, many Florida yards offer dry-stack storage of smaller boats; most New England marinas do not. Also, in addition to a shorter season, New England marinas and boatyards often suffer ice damage to piers and floats during the winter; Florida firms,

of course, do not. Operations on the Great Lakes do not incur repair costs associated with heavy salt water damage as do both Florida and New England coastal businesses. All in all, these kinds of endemic operating characteristics can lead to differences in financial structure that cause inaccuracies when cross-regional financial comparisons are made. Finally, both studies were conducted at a single point in time. Therefore, they either have or will become outdated. We have already observed some significant changes in financial structure in New England between our 1979 report and the current data.

To overcome these shortcomings, we have replicated the earlier work to ensure that the financial information we report is reasonably current and gathered on a national scale. Because we are reporting national data (that is, all respondents regardless of season have been included in the averages), the results in Section 4 represent approximate midpoints among all the various regions of the country. Just like the publicly available average financial data on other industries, ours is reasonably close to all sections of the country, although not precisely applicable to any. Table 1 shows the distribution of respondents on which we have complete data. It gives the number of observations for each set of type of business, regional location, and size of business as measured by total sales revenue for which we have seven or more responses. The asteriskad subsets are those on which data is presented in Section 4 of this report. Notice that each asteriskad subset is the total number of respondents for each business type subset.

Table 1
Subsets of Data Available in
National Marine Financial Data Bank as of June 1977

Bus. Type	Region	Size by Total Revenue	Number of Observations
Marinas	4 (GA, NC, and SC)	All	9
Marinas	National	$500,000	16
Marinas	National	$500K-$1 Mil	9
Marinas	National	$1 Mil	7
Marinas	National	All	32*
Combos	1 (NY & NE)	All	28
Combos	1 (NY & NE)	$500,000	9
Combos	1 (NY & NE)	$500K-$1 Mil	9
Combos	1 (NY & NE)	$1 Mil	10
Combos	3 (DC, DE, MD, NJ, VA)	$1 Mil	11
Combos	National	$500,000	13
Combos	National	$500K-$1 Mil	13
Combos	National	$1 Mil-$2 Mil	9
Combos	National	$2 Mil	11
Combos	National	All	46*
Boatyards	1 (NY & NE)	All	15
Boatyards	National	$1 Mil	12
Boatyards	National	$1 Mil	12
Boatyards	National	All	24*
B & M Dlrs	National	$1.3 Mil	9
B & M Dlrs	National	$1.3 Mil	9
B & M Dlrs	National	All	18*
Total (of asterisked subsets)			120

*Number of respondents for each business type subset

SECTION 2: DATA BANK CONTENT AND METHODOLOGY

Data Bank Content

The information in the data bank is made up of three categories: descriptive, financial ratio, and spread sheet data. The descriptive data portion (Exhibit 1, Section 4) describes the history of the responding businesses, their competitive environment, the number and type of products or services they offer, and various physical characteristics such as number of slips and moorings, amount of inside and outside storage, hauling methods available, relative amounts of owned versus leased property, and, for marinas and boatyards, whether they call themselves a marina, boatyard, or combination of the two. Although a small point, we have tried to find out what the difference is between the two types of businesses. Knowing this would enable more accurate reporting of financial data. So far, though, there are almost as many descriptions as there are people who would describe them. There is some agreement, though, that a firm is a marina when it does not store boats on land and, thus, does no launching and hauling. For example, notice that the data tables for marinas in Exhibit 4 show almost no income for hauling and storage. With this definition in mind, then, a boatyard is a business that does store boats on land and participates significantly in hauling and launching. However, the figures in Exhibit 1, Page 18 indicate marinas have larger on-land boat storage functions than boatyards. We might conclude, therefore, that marinas launch and store boats as a service related almost exclusively to slip and mooring rental whereas boatyards perform these activities as profit centers and as a service and repair adjunct.

The second category of data (Exhibit 2, Section 4) consists of quartile values for financial ratios computed from respondents' financial statements. We chose to report many of the ratios reported by the Robert Morris Associates' publication although our descriptions of them are our own. This allows for comparisons among marine and other kinds of businesses. The ratios that make up this section are the current, quick, earnings-to-interest (coverage ratio), return-on-net-worth, return-on-total- assets, debt-to-worth, fixed-assets-to-worth, inventory and receivables turnover, sales-to-working-capital, sales-to-net-fixed-assets, sales-to-total-assets, and cash-flow-to-current-maturity-of-long-term-debt.

Financial spread sheets comprise the third category of data in the data bank (Exhibits 3, 4 and 5). Spread sheets are financial statements—income statement and balance sheet—in which number values for accounts are reported as average percentages of various totals. For example, the entries on the income statement in Exhibit 3 are reported as median percentages of total sales revenue. With income statement spread sheet data, the analyst can learn the average values (among respondents) for typical income statement items as a percentage of sales.

The data bank also contains balance sheet spread sheet information (Exhibit 3). The balance sheet shows how much the business is worth and the relationship between money borrowed and money contributed by owners, among other things. This spread sheet presents balance sheet accounts as percentages of total assets; the numbers presented are medians.

Part of the spread sheet data contains median percentages of total sales for 21 different sources of sales revenue (Exhibit 4). Some of these are slip rental, hauling and storage, ice, liquor, service, fuel and oil, marine hardware, and engine and motor revenues. These "revenue spreads" are accompanied by gross profit margin percentages for each revenue source. With

this information, marine business managers can determine how their gross profit margins compare with the averages for their industry. We are not aware of any other generally available source of gross margin spreads in this level of detail on these industries (or on most others for that matter).

The last section of income statement data is the operating expense spread sheet (Exhibit 5). This part lists 24 operating expense accounts as median percentages of total operating expenses and total sales and is also not generally available elsewhere. For Exhibits 3, 4, and 5 rounding errors were distributed proportionately across all values where appropriate.

Presently, not all variables contain numbers. For example, we have no responses for marinas that sell sails (see Exhibit 4). So, this variable is reported as a missing value. It may turn out that there are less than seven (the minimum number required to report data) marinas that sell sails and thus, this variable would never have a value. This could have happened to any of the variables in the data bank, although we do have values for almost all variables. However, even with nearly 130 responses entered into the computer, the northwest United States region has as yet no representative. Thus, that whole section of the national sample has missing values as of this writing.

There are many possible applications of the information in the data bank. We expect that the most frequent users will be researchers, marine business owners/operators, and financial institutions. The research questions that could be addressed with the information in the data bank are countless. Some of these might include questions related to variations in profitability by region, are diversified marinas more or less profitable than concentrated ones, which sources of revenue generate the most (and least) profit, are marine businesses which operate on leased property more profitable than those operated on owned property, and many more.

The implications of typical financial structure data for marine business owners/operators are straightforward. These people can find out how their financial structure "stacks up" against the industry averages. Similarly, financial institutions can evaluate loan applications with more accurate financial data for comparison.

Methodology

The questionnaire for this study was prepared after interviews with industry people, researchers, and representatives of financial institutions. It was distributed in various ways. Many responses were generated by asking participants in our financial analysis seminars to complete the questionnaire. Boat and Motor Dealer magazine published the questionnaire and many firms responded to the magazine's article on the study. Other responses were initiated by telephone and mail requests for the questionnaire. The majority of responses came from mailing the questionnaire to firms and requesting that their representatives complete and return it.

Completed responses were tabulated using SAS (Statistical Analysis Software) on the University of Rhode Island mainframe computer. Output was arranged in the tables contained in Exhibits 1-5.

Many of the responses that were received were unusable due to incomplete questionnaires or, especially in the case of financial data, responses that were inconsistent. For example, the asset and liabilities sections of a balance sheet should sum to the same total; some of the respondents' balance sheet data did not. A few respondents reporting positive profit before taxes also listed operating expenses which, when summed, added to a total operating expense value that was larger than their total sales figure. Sixty-one responses were received with no financial data reported. These questionnaires contained only descriptive data.

Where possible, these problems were handled by either correcting mathematical errors, calling the respondent for corrections, or disregarding the response altogether.

SECTION 3: FUNDAMENTALS OF RATIO ANALYSIS

Financial ratio analysis (FRA) is a process through which a marina/boatyard manager or owner can determine the approximate degree of financial health represented by his firm's financial statements. Toward that goal there are a number of ways in which FRA can be useful to managers.

First, FRA can aid in interpreting and evaluating income statements (profit/loss statements) and balance sheets by reducing the amount of data contained in them to a workable amount. After computing several key ratios whose numerator and denominator are made up of selected items from the statements, a comprehensive analysis of the firm's financial position can be conducted by using the resulting ratios.

Second, FRA can make financial data more meaningful. Any ratio strikes a relationship between the numbers in its numerator and denominator. By selecting sets of numbers that are logically related, a few ratios can be used to comprehensively analyze a set of financial statements.

Third, ratios help to determine relative magnitudes of financial quantities. For example, the magnitude of the amount of a firm's debt has little meaning unless it is compared with the amount of the owner's investment in the business. Thus, the debt/equity ratio strikes a relationship between these quantities such that their relative magnitudes can be established.

Because of these advantages, FRA can help marina/boatyard managers make effective decisions about the firm's credit worthiness, potential earnings, and financial strengths and weaknesses. It involves simply selecting the financial entities to be compared from either the income statement or the balance sheet, dividing one by the other, and comparing the product with a base. This comparative base could be a history of ratios for the firm under analysis, or average ratio values from past periods computed from financial statements of other firms in the same industry, such as those contained in Exhibit 2.

To use the first of these approaches, a ratio's historical values could be computed to determine whether its trend is increasing, decreasing, or constant. The second approach requires availability of industry average financial ratios which were computed in the same way as those of the firm under analysis.

For this study ratios were selected for reporting that are consistent with those presented in Robert Morris Associate's and Dunn and Bradstreet's publications and the Troy Almanac. This practice allows for comparisons to be made between the marina/boatyard industry and other industries. Although the ratios we chose appear in other publications, our explanations of them are our own.

The financial structure of any marine business has several "dimensions." Each financial dimension may be measured by several ratios; the financial dimensions themselves are not normally directly measurable. To analyze a

firm's financial structure comprehensively, one must select a set of ratios made up of subsets, each of which represents a dimension. In this section, dimensions will be explained first. They are liquidity, interest coverage, profitability, leverage, and activity. Then the ratios which collectively measure each dimension will be discussed. The method of computation for each one will be shown, followed by its interpretation.*

Liquidity

The liquidity of a marine business is its ability to pay current liabilities as they come due (current liabilities are debts due within one year). The only funds available for payment of short-term debt are either cash or other current assets readily convertible to cash. Consequently, liquidity is measured by ratios that strike a relationship between current liabilities and selected current assets.

$$\text{CURRENT RATIO} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets are those normally expected to flow into cash in the course of a merchandising cycle. Ordinarily, they include cash, notes and accounts receivable (due within the next 12 months), inventory, and marketable securities (at current realizable values).

Current Liabilities are short-term obligations for the payment of cash due on demand or within a year. Ordinarily, they include short-term notes and accounts payable for merchandise, current portion of long-term debt, taxes due, and other accruals.

Interpretation: This ratio identifies the relationship between the liquid assets of the firm and what it expects to pay out to creditors and suppliers within the next fiscal year, and is a rough indication of a marine business's ability to service its current obligations. Generally, the higher the current ratio, the greater the "cushion" the firm would have to fall back on in case of a decline in revenues or a call-in of loans by creditors. However, the composition and "quality" of current assets is a critical factor in the analysis of an individual company's liquidity. Caution should be used when examining current assets because some problems may arise in collecting accounts receivable and liquidating a company's inventory.

$$\text{QUICK RATIO} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

Interpretation: After subtracting inventories from total current assets, the quick ratio (also called "acid test ratio") is computed by dividing the resulting value for "quick assets" by total current liabilities (the same denominator used in the current ratio). A value below 1.0 usually is interpreted to mean that inventory would have to be sold to liquidate short term obligations. This ratio is important to certain retail firms such as boat dealers because their specialized inventories may face a limited resale market. If the need arises, failure to keep enough liquid reserve on hand may lead to additional borrowing.

*Ratio explanations are adapted with permission from Robert Morris Associates' Annual Statement Studies.

Coverage

Coverage refers to a marine business's ability to make debt payments which include interest and/or premiums. Ratios that measure coverage consist of one component to estimate flow of funds into the firm and another for periodic payments on debt.

$$\text{EBIT TO INTEREST} = \frac{\text{Earnings Before Interest and Taxes}}{\text{Annual Interest Expense}}$$

Interpretation: A firm's ability to make interest payments is partly a function of the magnitude of its profitability and the size of its interest obligations. Whereas this ratio shows how many times profit before interest and taxes is greater or less than present interest expense, it also can show the ability of the firm to take on additional interest expense related to new debt. The higher the value of this ratio for a particular firm, the more it would indicate the ability to service additional debt. Potential difficulties with debt repayment would be indicated by low values.

$$\text{Cash Flow to Current Maturities of Long-Term Debt} = \frac{\text{Net Profit plus Depreciation, Depletion, Amortization Expenses}}{\text{Current Portion of Long-Term Debt}}$$

Interpretation: The current portion of long-term debt is the amount of payments due during the current accounting period (year) for the firm's long-term obligations. Net profit plus depreciation, depletion and amortization expenses is the popular approximation of available cash flow. Thus, this ratio measures a company's ability to meet its currently maturing debt obligations and also its capacity for additional debt. Values higher than the industry average would indicate above average debt service ability; low values would have the opposite implication.

Profitability

This familiar dimension of a marine business's financial structure concerns management's ability to control expenses and to earn a return on committed funds. Ratios that measure profitability usually consist of a profit element and one that represents the amount of funds invested in whatever aspect of the firm is of interest to the analyst.

Net profit can be calculated either before or after taxes. Robert Morris Associates use net profit before taxes. The analyst should ensure that the ratio elements used to compute the profitability ratios (and others as well) are the same as those used to compute the industry average against which the value will be compared. Also note that the following two ratios are converted to and reported as percentages.

$$\text{RETURN ON NET WORTH} = \frac{\text{Net Profit Before Taxes}}{\text{Tangible Net Worth}} \times 100$$

Interpretation: This ratio is one version of the popular "return on equity" or "return on investment" ratio. It is often used as a measure of management performance although such interpretations may be misleading. A high value would normally be interpreted as reflecting effective management but instead could reflect undercapitalization. Low returns, often attributable to inefficiency, could be caused instead by overcapitalization. Another problem with interpreting this ratio is that a firm in business for many years might have fully depreciated assets which would precipitate a low net worth relative to the actual value of the assets at current market prices.

$$\text{RETURN ON TOTAL ASSETS} = \frac{\text{Net Profit Before Taxes}}{\text{Total Assets}} \times 100$$

Interpretation: Another important management consideration is how much profit the firm generates compared to total assets. This issue is addressed by this ratio. It assesses the efficiency with which management is employing total assets to generate profit. However, this ratio can be distorted by such things as aged plant and equipment (near fully depreciated), large intangible asset balances, or atypical income statement entries. These characteristics should be examined if the value of this ratio for a particular firm is very large or small.

Leverage

The extent to which a marine business relies on debt as opposed to owner's capital (net worth) is its leverage position. A highly leveraged firm is one with a high proportion of debt relative to owner's investment.

$$\text{DEBT TO WORTH} = \frac{\text{Total Liabilities}}{\text{Tangible Net Worth}}$$

Net Worth is total assets minus total liabilities. It reflects the book value of the firm to its owners and is not necessarily the same as the current market value of the firm.

Interpretation: Also known as the debt-to-equity ratio, this ratio compares the amount of capital granted to a firm by creditors (debt) to the amount contributed by owners (net worth or owners' equity). Some analysts prefer to think of amount of contributed capital as claims against a firm. Therefore, this ratio would compare claims against the firm by its creditors with claims by owners. The lower this ratio, the fewer would be creditors' claims against a firm relative to owners' claims and the greater would be the amount of financial safety attributed to the business. Conversely, higher values for this ratio would be associated with financial risk, limited debt capacity, and sensitivity to business fluctuations.

Tangible net worth is computed by subtracting such intangible assets as goodwill, patents, copyrights, etc., from the value of total net worth.

$$\text{FIXED ASSETS TO WORTH} = \frac{\text{Net Fixed Assets}}{\text{Tangible Net Worth}}$$

Interpretation: This ratio expresses the relationship between the amount of owners' capital and fixed assets. When fixed assets are substantial relative to owners' capital (and the ratio is, therefore, relatively high), there would be less capital available for creditors in the case of liquidation. A lower value would indicate availability of capital for creditors in the event of liquidation. Companies having large amounts of leased assets which are not recorded on the balance sheet would likely have an artificially low value for this ratio.

Activity

Activity ratios, also called "efficiency" or "turnover ratios," measure how effectively a firm's assets are managed. Their purpose is to examine the relationship between a measure of sales and an asset account.

$$\text{INVENTORY TURNOVER} = \frac{\text{Cost of Sales}}{\text{Inventory}}$$

Interpretation: By dividing cost of sales (also called cost of goods sold) from the income statement by the balance sheet account, inventory, this ratio shows the number of times inventory is turned over during the accounting period. Because cost of sales is the value of merchandise sold and inventory is the value of merchandise in stock and, therefore, unsold (for a retailer), it measures the number of inventory balance "replacements" that are necessary to equal one year's worth of sales. The higher this ratio, the more positively the retail function of the company would be evaluated. High values would be associated with high liquidity and effective selling activities. On the other hand, low values would be related to negative evaluations of the suitability of inventory to customers' needs in some way and with low liquidity. However, low inventory turnover could indicate, in some instances, a buildup of inventory for expansion purposes or in anticipation of future inventory acquisition or production difficulties. Some marine business people have complained about the peculiar inventory purchasing requirements of some suppliers who insist that retailers buy excessively large amounts of inventory at one time.

$$\text{DAYS' INVENTORY} = \frac{365}{\text{Inventory Turnover Ratio}}$$

Interpretation: The inventory turnover ratio can be converted into the number of days of sales that could be supported by the inventory balance held by the firm simply by dividing the ratio into 365. This conversion, called "days' inventory," can be monitored over time, along with inventory turnover, to spot buildups or declines in inventory balances. The ideal level of inventory is that which ties up the least amount of capital while resulting in no losses of sales.

$$\text{RECEIVABLES TURNOVER} = \frac{\text{Net Sales}}{\text{Accounts and Notes REceivable}}$$

Interpretation: Receivables turnover shows the number of times by which net sales (total sales less sales discounts and allowances) is greater than the accounts receivables (trade) balance on the balance sheet. This

quotient, like the inventory ratio, is a turnover or "times" figure. The lower the receivables turnover value, the longer would be the average length of time between making a credit sale and cash collection. If this ratio is much lower than the industry figure, closer attention should be paid to the quality of the firm's receivables and also to its credit granting terms.

For some businesses this ratio may be misleading because of their credit policies. A business may have several different sales generating activities of that only one or two actually grant credit to customers. For example, a boatyard which sells boats, rents boat, operates a marine store, provides service, and sells gas might only extend credit to customers for service work. In this case, net sales would be very much higher in proportion to credit sales than for a similar firm that granted credit for all of its sales activities. Therefore, between-firm comparisons can be misleading unless it is understood that the credit terms of the businesses are similar. The industry figures reported represent typical credit policies in the industry and were computed by dividing net sales across the firm by receivables balances.

For internal purposes, managers might prefer to track receivables turnover over time by changing the numerator from net sales to net credit sales. This change would give a much better idea of the actual performance of the businesses' credit granting policies. However, for comparison with the industry figures, net sales should be used as the numerator. Managers might also prefer to compute receivables turnover on a monthly basis to analyze the impact of seasonal fluctuations. Since the reported figures are based on annual sales and one day's receivables balance, they ignore seasonal variations.

As with inventory turnover, it may prove useful to make these calculations by month so that the business can account for seasonal fluctuations.

$$\text{DAYS RECEIVABLES} = \frac{365}{\text{Receivables Turnover Ratio}}$$

Interpretation: Also known as "average collection period," this ratio shows the average number of days' receivables are uncollected. The higher the receivables turnover ratio, the shorter will be the collection period. A company's credit terms will influence this ratio and should be taken into consideration before comparisons with the industry average are made. A large number of days' receivables is usually associated with lack of control over the collection or credit granting functions.

$$\text{SALES TO WORKING CAPITAL} = \frac{\text{Net Sales}}{\text{Net Working Capital}}$$

Net Working Capital equals current assets less current liabilities.

Interpretation: Working capital is viewed by creditors as a measure of a firm's ability to meet current obligations because it is the amount of current assets in excess of current liabilities. This ratio measures the efficiency with which working capital is used. A low value is usually

related to inefficiency in working capital application; a high value may indicate limited availability of liquid assets.

$$\text{SALES TO NET FIXED ASSETS} = \frac{\text{Net Sales}}{\text{Net Fixed Assets (net of accumulated depreciation)}}$$

Interpretation: This ratio measures the extent to which a firm is efficiently using its fixed assets. A low value may mean that the firm is not using its fixed assets to a reasonable proportion of capacity. A high value usually relates to inefficiency in the productive use of fixed assets. This ratio can be distorted by variations in depreciation method and by the speed with which fixed assets are replaced. These factors should be taken into consideration when comparisons are made.

$$\text{SALES TO TOTAL ASSETS} = \frac{\text{Net Sales}}{\text{Total Assets}}$$

Interpretation: This ratio measures the volume of business generated by the firm's level of investment in total assets. High values usually mean productive application of capital; low values often mean that sales should be increased or some assets should be disposed of, or both.

SECTION 4: DATA EXHIBITS

Caution: The financial quantities derived from the present survey as represented in the following data tables do not in and of themselves necessarily imply sound or unsound management practice. Comparisons should, therefore, be made with full understanding of the derivation of each financial entity and the range of interpretations that may apply to each.

Also note that the financial quantities presented were derived from marinas, boatyards, combination marinas and boatyards, and boatdealers across the country. A particular firm's operating characteristics may reflect regional rather than financial peculiarities.

Exhibit 1
Descriptive Data, 1984-85
National Marine Financial Data Bank, 1987
University of Rhode Island, College of Business Administration

	Industry No. of Firms		Marinas 32	Boatyards 24	Combinations 46	Boat Dealers 18
MOORING CAPACITY	Number of Moorings	MEAN	174	33	40	100
		MAX	297	211	380	130
		MIN	0	14	9	0
	Average Length of Boats on Moorings (feet)	MEAN	25	32	35	25
		MAX	28	33	36	28
		MIN	—	30	26	—
	% Utilized 1984-85	MEDIAN	100	100	100	—
		MAX	100	100	100	100
		MIN	—	95	20	—
SLIP CAPACITY	Number of Slips	MEDIAN	142	61	—	20
		MAX	667	105	839	49
		MIN	29	9	6	0
	Average Length of Boats (feet)	MEDIAN	32	30	31	26
		MAX	35	38	32	30
		MIN	16	27	30	—
	% Utilized 1984-85	MEDIAN	93	100	100	100
		MAX	100	100	100	90
		MIN	0	90	50	—
BOAT STORAGE CAPACITY--INDOOR	Number of Boats	MEDIAN	32	60	48	55
		MAX	348	250	370	100
		MIN	0	5	3	12
	Average Length of Boats (feet)	MEDIAN	21.5	34	32	20
		MAX	35	47	40	22
		MIN	—	16	16	19
	% Utilized 1984-85	MEDIAN	90	100	100	100
		MAX	100	100	100	100
		MIN	—	98	90	23

Exhibit 1 (Cont.)

			Marinas	Boatyards	Combinations	Boat Dealers
	Industry No. of Firms		32	24	46	18
DRY STACK STORAGE	Number of Boats	MEDIAN	167	80	90	300
		MAX	340	123	175	330
		MIN	0	0	0	0
	Average Length of Boats (feet)	MEDIAN	18	20	22	21
		MAX	20	25	22	22
		MIN	—	—	—	—
	% Utilized 1984-85	MEDIAN	90	50	—	90
		MAX	110	100	100	100
		MIN	—	—	—	—
GENERAL FACTORS	Total Operational Land Acreage (Acres)	MEDIAN	4	4	4	2
		MAX	32	14	71	10
		MIN	1	1	1	.1
	Number of Competitors Within 1 Mile Radius	MEDIAN	2	1	2	1.5
		MAX	7	11	19	15
		MIN	0	0	0	0
	Estimated Market Value of Fixed Assets	MEDIAN	$ 1,075,000	$ 750,000	$ 1,016,433	$ 287,500
		MAX	$20,000,000	$4,000,000	$17,000,000	$1,750,000
		MIN	$ 280,000	$ 35,000	$ 80,240	$ 25,000
AGE	Number of Years Present Owners Have Owned the Business	MEAN	12	6	8	3
		MAX	45	26	72	102
		MIN	1	2	2	2
	Year Business First Established	MEDIAN	1970	1970	1957	1971
		MOST RECENT	1983	1980	1985	1984
		OLDEST	1924	1856	1850	1854
	Percentage Over 4 Years Old		82.8	100	95.4	88.8
	Percentage Less Than 4 Years Old		17.2	0	4.6	11.2

Exhibit 1 (Cont.)

			Marinas	Boatyards	Combinations	Boat Dealers
	Industry					
	No. of Firms		32	24	46	18
BOAT STORAGE CAPACITY -- OUTDOOR	Number of Boats	MEDIAN	68	50	125	10
		MAX	500	180	600	50
		MIN	10	2	10	10
	Average Length of Boats (feet)	MEDIAN	25.5	33.5	30	19
		MAX	50	50	45	22
		MIN	20	24	14	19
	% Utilized 1984-85	MEDIAN	85	96.5	100	59
		MAX	100	100	100	100
		MIN	14	25	5	18
HAULING METHODS (% OF SAMPLE USING EACH)	Travelift		13.7	34.4	28.7	--
	Crane		5.9	18.2	14.7	11.1
	Public Ramp		19.6	3.6	8.5	22.2
	Private Ramp		15.7	7.3	8.5	22.2
	Railway		3.9	14.5	10.9	—
	Hydraulic Trailer		9.8	12.7	10.9	—
	Forklift		17.6	7.3	14.7	22.2
	Other		13.8	3.0	2.3	—
BUILDINGS	Owned (Square Feet) (No.)	MEDIAN	10,000 (3)	16,754 (3)	17,515 (5)	10,000 (2)
		MAX	181,260 (6)	60,000 (10)	120,000 (14)	80,000 (4)
		MIN	0	0	0	0
	Leased (Square Feet) (No.)	MEDIAN	8,385 (1.5)	5,100 (2)	6,762 (1)	10,800 (2)
		MAX	54,000 (5)	29,850 (9)	68,000 (10)	29,275 (3)
		MIN	0	0	0	0
EMPLOYEES -- FULL-TIME EQUIVALENT (NO.)	Summer	MEAN	15	19	13	10
		MAX	49	85	120	28
		MIN	1	2	4	3
	Fall	MEAN	13	26	24	13
		MAX	35	85	105	24
		MIN	2	1	2	2
	Winter	MEAN	9	24	19	11
		MAX	34	85	90	24
		MIN	1	1	0	1
	Spring	MEAN	8	22	7	10
		MAX	36	85	105	24
		MIN	2	2	2	2

Exhibit 1 (Cont.)

BUSINESS ORGANIZATION FACTORS

Industry No. of Firms		Marinas 32	Boatyards 24	Combinations 46	Boat Dealers 18
Form of Legal Organization (%)	Straight Corp.	60.0	63.6	73.3	77.8
	Sub-Ch.S Corp.	13.3	27.3	17.8	5.6
	Sole Proprietorship	13.3	9.1	6.7	11.1
	Partnership	13.3	0	2.2	5.6
Basis on Which Financial Statements Prepared (%)	Cash	44.4	31.8	28.6	11.1
	Accrual	55.6	68.2	71.4	88.9
Month in Which Accounting Year Ends (%)	January	--	--	2.2	--
	February	3.3	--	6.5	--
	March	3.3	4.2	6.5	11.1
	April	--	--	6.5	--
	May	--	--	--	--
	June	3.3	4.2	2.2	--
	July	--	4.2	4.3	5.6
	August	3.3	--	2.2	--
	September	16.7	29.2	6.5	5.6
	October	10.0	25.0	8.7	11.1
	November	3.3	--	2.2	5.6
	December	56.7	29.2	52.2	61.1

Exhibit 2
Financial Ratios Reported as Upper and Lower Quartiles and Medians for 1984-1985
National Marine Financial Data Bank, 1987
University of Rhode Island, College of Business Administration

		Type of Firm			
		Marinas	Boatyards	Combos	Boat Dealers
No. of Firms		32	24	46	18
Ratios:					
Current	U Quartile	3.4	2.7	4.5	2.6
	Median	1.5	1.7	2.0	1.6
	L Quartile	1.1	1.3	1.2	1.3
Quick	U Quartile	1.4	1.4	2.6	.5
	Median	.5	1.0	.9	.2
	L Quartile	.1	.6	.4	.1
Sales/Receivables	U Quartile	4.1 81	15 25	17 22	3.3 112
	Median	12 31	31 12	24 15	6.2 49
	L Quartile	31 12	56 6.5	34 9.4	19.2 19
Cost of Sales/Inventory	U Quartile	49 7.7	33 1.1	58 6.3	131 2.8
	Median	93 3.9	69 5.4	88 4.2	155 2.4
	L Quartile	164 2.2	116 3.2	132 2.8	203 1.8
Sales/Working Capital	U Quartile	1.0	3.7	2.4	3.3
	Median	5.7	9.7	5.5	6.1
	L Quartile	16	20	15	12
EBIT/Interest	U Quartile	4.3	9.7	7	4
	Median	1.9	3.7	2.8	1.8
	L Quartile	1.2	1.0	1.2	1.2

Underlined values appear to the left of the ratio figures for Sales/Receivables and Cost of Sales/Inventory. These values correspond to Days Receivables (Average Collection Period) and Days Inventory, respectively. They are calculated by dividing the respective ratios into 365 days.

Exhibit 2 (Cont.)

		Type of Firm			
		Marinas	Boatyards	Combos	Boat Dealers
Fixed/Worth	U Quartile	.5	.4	.6	.2
	Median	.9	.8	1.0	.6
	L Quartile	3.1	1.6	2.0	.9
Debt/Worth	U Quartile	.2	.4	.3	1.0
	Median	1.6	.9	1.3	1.9
	L Quartile	5.7	2.2	4.5	3.1
Percent Profit Before Taxes/ Tangible Net Worth	U Quartile	63	21	61	48
	Median	9	17	22	11
	L Quartile	-12	9.1	7.8	4.6
Percent Profit Before Taxes/ Total Assets	U Quartile	11	11	16	11
	Median	2.3	7.1	7.5	3.4
	L Quartile	-3	1.0	1.4	1.7
Sales/Net Fixed Assets	U Quartile	4.8	9.5	8.6	47
	Median	3.4	5	4.2	16
	L Quartile	1.1	2.7	2.6	4.1
Sales/Total Assets	U Quartile	2.1	2.9	2.3	2.4
	Median	1.3	1.8	1.7	1.7
	L Quartile	.5	1.4	1.2	1.5
Cash Flow/Cur. Mat. LTD	U Quartile	4.6	16	6.9	3.9
	Median	1.3	2.4	2.3	1.9
	L Quartile	-.5	1.6	.3	.6

Exhibit 3
100 Percent Balance Sheet and Income Statement 1984-1985
University of Rhode Island, College of Business Administration
National Marine Financial Data Bank, 1987

Balance Sheet	(Reported values are medians)			
	Marinas	Boatyards	Combos	Boat Dealers
No. of Firms	32	24	46	18
Assets:	%	%	%	%
Cash and Equivalents	5.5	2.3	8.4	2.0
Accounts and Notes Receivable--Trade	5.1	24.7	14.9	3.1
Inventory	22.9	20.6	22.4	67.3
All Other Current Assets	2.2	2.9	4.3	1.8
Total Current Assets	35.7	50.5	50.0	74.2
Fixed Assets (net)	58.8	43.3	43.0	12.4
Intagibles (net)	.5	3.4	2.5	11.5
All Other Noncurrent	5.0	2.8	4.5	1.9
Total	100	100	100	100
Liabilities:	%	%	%	%
Notes Payable	14.5	4.0	23.1	35.8
Current Mat. LTD	6.1	5.7	3.4	6.4
Accounts and Notes Payable (trade)	5.9	6.0	6.1	3.3
Accrued Expenses	3.0	11.6	6.1	1.2
Total Current Liabilities	29.5	27.3	38.7	46.7
Long-Term Debt	46.8	33.1	28.0	19.7
Total Liabilities	76.3	60.4	66.7	65.8
Net Worth	23.7	39.6	33.3	34.2
Total	100	100	100	100
Income Statement				
No. of Firms	32	24	46	18
	%	%	%	%
Net Sales	100	100	100	100
Cost of Sales	53.6	55.0	51.4	73.4
Gross Profit	46.4	45.0	48.6	26.6
Operating Expenses	40.4	34.9	41.3	21.4
Operating Profit	6.0	10.1	7.3	5.2
All Other Expenses (net of other income)	4.0	6.1	2.2	3.1
Profit Before Taxes	2.0	4.0	5.1	2.1

Revenue Distribution 1984-85--Reported as Medians
University of Rhode Island, College of Business Administration
National Marina Financial Data Bank, 1987

Sources of Revenue	Marinas		Boatyards		Combos		Boat Dealers	
	% of All Sales	Gross Profit %	% of All Sales	Gross Profit %	% of All Sales	Gross Profit %	% of All Sales	Gross Profit %
Mooring and Slip Rental	24.8	92.4	10.2	78.8	16.9	87.7	5.3	80.0
Fuel	13.7	22.4	2.1	18.2	6.4	16.0	3.6	21.4
Service/Repairs	10.6	66.6	38.7	43.0	31.3	51.1	7.9	50.4
Hauling and Storage	--	--	1.7	42.1	2.1	68.6	--	--
Bait and Tackle	1.2	40.0	--	--	1.3	-2.7	--	--
Brokerage	--	--	2.5	34.5	1.6	12.7	2.5	10.9
Hardware	9.4	25.5	20.6	20.5	8.9	25.4	12.9	32.8
Restaurant	7.5	6.7	--	--	13.0	60.0	--	--
Boat Building	--	--	40.2	31.4	14.7	--	--	--
New Boat Sales	29.9	10.9	13.6	15.5	37.1	18.4	47.6	18.7
Traded in Boat Sales	6.9	13.9	--	--	7.6	16.5	6.9	27.1
Motors and Engines	16.7	15.5	8.9	26.3	3.4	22.5	17.9	16.5
Electronics	16.8	35.3	2.9	72.2	6.4	36.3	2.9	39.8
Groceries	4.9	21.8	--	--	1.4	25.0	--	--
Lodging	14.2	-16.0	--	--	--	--	--	--
Sails and Canvas Prod.	--	--	4.5	30.9	3.2	18.0	--	--
Ice	1	40.0	2.3	29.8	.3	40.6	--	--
Liquor	3	30.0	--	--	1.1	13.7	--	--
	*		*		*		*	

*Column does not add to 100 percent. The percentages reported are the medians among those respondents that have each source of revenue.

Exhibit 5
Expense Distribution 1984-1985--Reported as Medians
University of Rhode Island, College of Business Administration
National Marine Financial Data Bank, 1987

Type of Business	Marinas	Boatyards	Combos	Boat Dealers
	% Total Sales	% Total Sales	% Total Sales	% Total Sales
Owners' Salary	5.5	4.3	4.4	2.1
Other Salaries and Wages	10.1	8.3	9.5	6.4
Advertising	1.1	.8	.9	1.5
Office Supplies	1.0	1.3	1.2	.6
Rent (Building, Docks, Land)	2.3	4.4	3.3	2.0
Rent (Equipment)	.6	.2	.3	.3
Pensions	1.5	1.1	1.4	.7
Heat/Electricity	1.4	1.6	1.7	.6
Travel/Entertainment	.3	.5	.4	.4
Insurance	1.9	2.5	2.9	1.1
Interest	3.3	1.1	1.7	3.1
Legal/Accounting	.6	.6	.6	.3
Repairs/Maintenance	2.1	2.3	2.0	.6
Vehicles	.4	1.0	.5	.6
Depreciation--Bldgs.	3.9	2.1	3.0	1.1
Depreciation--Fixtures	2.0	2.7	1.7	.7
Taxes--Payroll	1.4	2.3	2.2	.8
Taxes--Property	1.1	.5	.8	.3
Other	1.9	3.3	5.0	1.3
Total	42.4	40.9	43.5	24.5