DHI
Door Security + Safety Professionals

2017 PROFIT Report

An analysis of fiscal 2016

Prepared by
Profit Planning Group

Summary: 2017 Profit Report
Making a Good Business Even Better

Most distributors can justifiably feel pretty good about their recent operating performance. A growing, of not booming, economy has helped generate reasonable sales growth for most firms. There is a chance for firms to collect their corrective breath and plan for the future.

At the same time, there is continual pressure on gross margins from both existing and potentially new competitors. At the same time, upward pressures on costs, particularly payroll, refuse to go away. Given this mixed environment, this report will address three key questions for DHI distributors:

- How are we doing? What is the typical level of profitability in the industry?
- How good can we be? What results are being generated by the most successful firms?
- How do we get to high-profit results? Which of the Critical Profit Variables (CPVs) appear to drive profitability?

Typical Versus High-Profit
The first two questions are easily answered by examining the figures in the top part of *Exhibit 1*. These figures present two different measures of profit for both the typical DHI member and the most profitable members.

Profit Before Taxes percentage measures pre-tax profit as a percent of revenue. For the typical DHI member this figure was 5 percent, while the high-profit firms enjoyed a 8.4 percent PBT.

Return on Assets (ROA) calculates the same pre-tax profit figure as a percent of the total asset investment in the business. Again, there was a striking difference with the typical firm at 14 percent versus 26 percent for the high-profit firms.

The Critical Profit Drivers
In trying to move from typical to high-profit, the key is to understand the nature of the CPVs. Namely, which ones are most important and how did they impact performance for the typical and high-profit firms.

Managing the CPVs
The CPV results for the typical firm and high-profit firm in the industry are summarized in the figures in the bottom half of *Exhibit 1*. While there are other factors which could be examined in evaluating performance, these are the ones that really drive performance.

Exhibit 1
The Critical Profit Variables

	Typical	High Profit
Performance Results		
Profit Margin (pre tax)	5.0%	8.4%
Return on Assets	14.0%	26.0%
The Critical Profit Variables		
Sales Change	4.9%	11.9%
Gross Margin	32.3%	34.6%
Payroll Expense	20.6%	21.0%
Non-Payroll Expenses	6.4%	5.2%

One of the common misunderstandings regarding the CPVs is that to be a high-profit firm it is necessary to 1) do a lot better than the typical firm and 2) do a lot better in every CPVs. Nothing could be further from the truth.

As it turns out, some of the differences in the CPVs between typical and high-profit are often extremely small. The small differences tend to multiply to produce major changes in profit margin. This perspective has been repeated constantly by the Profit Planning Group as "little things mean a lot."

It is also often surprising to learn that it is not even necessary to do a little better everywhere. No firm produces superior results for every single CPV in either good times or bad. Successful firms manage their CPV performance to maximize overall profitability. This also is great news for the typical firm. Perfection is not required, only blending the CPVs in a positive way. With such blending, profit rises significantly.

The CPVs that are the most important contributors to enhancing profit are sales growth, gross margin, payroll expenses and non-payroll expenses. Each factor must be planned carefully to ensure adequate profits.

- **Sales Growth**
  There is a common misperception that sales solves all problems. Sales certainly helps with most problems. However, the ideal level of sales growth is in a fairly narrow range. Excessively slow growth certainly creates profit problems. Interestingly, excessively rapid growth does also.

  Slow sales growth means that expenses, which tend to be tied closely to inflation, out-pace the rate of growth so that expenses as a percent of sales increase. While very few firms believe so, rapid sales growth is also a problem. Financing rapid growth is always a challenge, and operating systems tend to get taxed when growth is too rapid.

The rate of sales growth that allows firms to operate without serious financial challenges depends upon the rate of inflation. The “ideal” rate of growth is the inflation rate plus three to six percentage points. So, if the inflation rate is 2 percent, then ideal sales growth would be in the 5 to 8 percent range. This should be viewed as a minimum. Firms may grow faster, but without basic growth, profit improvement is very difficult.

- **Gross Margin**
  Price pressures never go away, even if sales are growing. It would seem that as sales growth takes hold, firms would enjoy a pricing advantage. The reality is just the opposite. The excitement associated with increasing sales tends to cause firms to become lax with regard to pricing control.

  In almost every industry an adequate gross margin is a major determinant of profitability. The real driver behind improved, or at least maintained, gross margin performance is continual monitoring. There is not a firm in any industry that could not make a modest improvement in gross margin, even including the high-profit ones.

  Gross margin, in turn, is largely a pricing issue. Margin enhancement through pricing changes must involve stretching the price matrix. In simplest terms, distributors tend to be price aggressive on fast-selling items, which they should be. However, they tend to under-price slower selling items. It is a substantial opportunity to raise gross margin. Of even greater consequence, it is payroll-expense free.

- **Payroll Expenses**
  Payroll is <u>always</u> the largest expense factor in a distribution business. As a result, controlling payroll is essential to controlling expenses. Payroll is another area where a specific improvement goal can be established. Ideally, payroll costs should increase by about 2 percent less than sales. For example, if sales increase by 5 percent, then payroll should only be allowed to increase by 3 percent.

  At first glance, controlling payroll growth would appear to be a relatively simple, and probably easy, to achieve target. The reality is a different story. Controlling payroll becomes even more difficult in a growth market. Firms often hire in expectation of even more sales growth. Additionally, the same "eye off of the ball" problem associated with gross margin also takes place with regard to payroll.

- **Non-Payroll Expenses**
  The non-payroll expenses are the "least difficult" of expenses to control. Most of these expenses can be brought into line as long as sales really are rising faster than inflation. The vast majority of these expenses are directly related to the rate of inflation. As long as sales growth is maintained above the inflation rate, there is the potential to lower the non-payroll expense percentage.

Moving Towards High-Profit Results

The high-profit firms produce great results virtually every year. They also reflect the fact that there are no industry barriers to success. The key to improved performance is to develop a specific plan for each of the CPVs and combine them in a positive way. The goal is not perfection. The goal is to do a little better across the board. It is an opportunity which is open to every firm.

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Introduction

This report presents a detailed but straightforward analysis of financial and operating characteristics of 45 participating DHI firms. Results are presented in tables and graphs designed to provide a comprehensive guide for analyzing profitability.

Methodology

Surveys were mailed to all members to collect detailed financial and operating data. Completed surveys were returned directly to Profit Planning Group for analysis. Individual responses were kept strictly confidential by Profit Planning Group. Neither DHI nor any other firm had access to any individual firm's survey or results.

Report Format

This report is organized into the following sections.

- **Executive Summary**
  An overview of study results including a graphical presentation of key results.
- **Detailed Results**
  An analysis of return on investment and financial and productivity ratios.
- **Regions**
  Geographic regions are analyzed. Participants were grouped according to regions specified by DHI.
- **Trends**
  An examination of changes in performance over time for key results and ratios.
- **Ratio Calculation**
  A summary of ratio calculations.

Statistics

- **Medians**
  Most of the figures presented in this report are based on median results. A median is the middle value in the sorted list of all reported values. Unlike averages, medians are not influenced by extreme values and, therefore, best represent a typical firm. Medians are the preferred statistic for this analysis.
- **High-Profit Group**
  A high-profit group was identified based on pre-tax return on assets (ROA). This group includes firms with the top ROA results. High-profit results are based on the medians of data reported by these firms.
- **Averages for Inventory, Accounts Receivable, and Accounts Payable**
  If available, calculations use average values for inventory, accounts receivable, and accounts payable.
- **FIFO Adjustment**
  For firms reporting LIFO reserve data, inventory, cost of goods sold and gross margin were adjusted to a FIFO basis.
- **The N/A Label**
  Throughout this report, "N/A" designates results that are not available due to limited data.

Executive Summary

Financial performance varied widely among participants in 2016. The results show a typical firm generated sales of $19,631,289 and a pre-tax profit of 5.0%. Sales for the typical high-profit firm were $12,929,948, with a profit of 8.4%. Of greatest consequence, the typical firm had a 14.0% pre-tax return on assets (profit before taxes expressed as a percentage of total assets) while the typical high-profit firm generated an ROA of 26.0%.

A number of factors led to the differences in overall results. In most instances these differences can be illustrated by examining what are commonly called the critical profit variables (CPVs). The following exhibit compares the critical profit variables for the typical firm and the typical high-profit firm.

The Critical Profit Variables

	Typical DHI Distributor	High Profit DHI
Sales per Employee Measures employee productivity	$333,914	$369,210
Gross Margin Percentage Reflects the ability to manage COGS effectively	32.3%	34.6%
Operating Expense Percentage Focuses on expense control	27.0%	26.2%
Inventory Turnover (times) Reflects how well inventory is managed	6.7	11.0
Average Collection Period (days) Reflects accounts receivable collection practices	66.5	68.7

High-profit firms may not always perform better in every CPV but their *combined* CPV performance produces better overall results. The following table presents a comparison of these results. Since these differences can dramatically improve operating performance it is important that every firm is aware of their impact.

An Overview of Financial Results

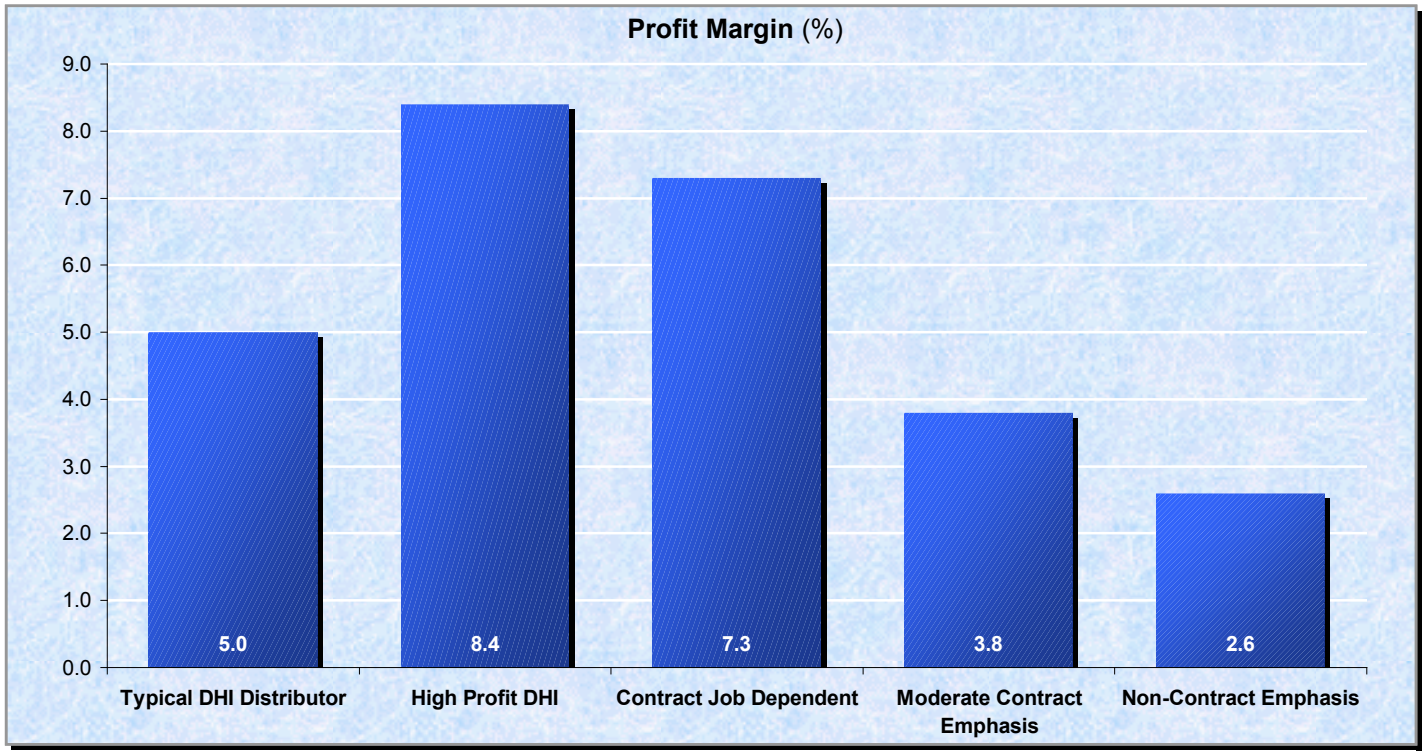
	Typical DHI Distributor	High Profit DHI
Income Statement		
Net Sales	$19,631,289	$12,929,948
Cost of Goods Sold	13,290,383	8,456,186
Gross Margin	6,340,906	4,473,762
Operating Expenses	5,300,448	3,387,646
Operating Profit	1,040,458	1,086,116
Other Income/Expenses	-58,894	0
Profit Before Taxes	$981,564	$1,086,116
Profit Before Taxes (%)	5.0%	8.4%
Assets		
Cash	$287,459	$458,804
Accounts Receivable	3,898,213	2,465,032
Inventory	2,012,207	704,891
All Other Assets	813,296	542,224
Total Assets	$7,011,175	$4,170,951
Return on Assets (Pre-Tax)	14.0%	26.0%

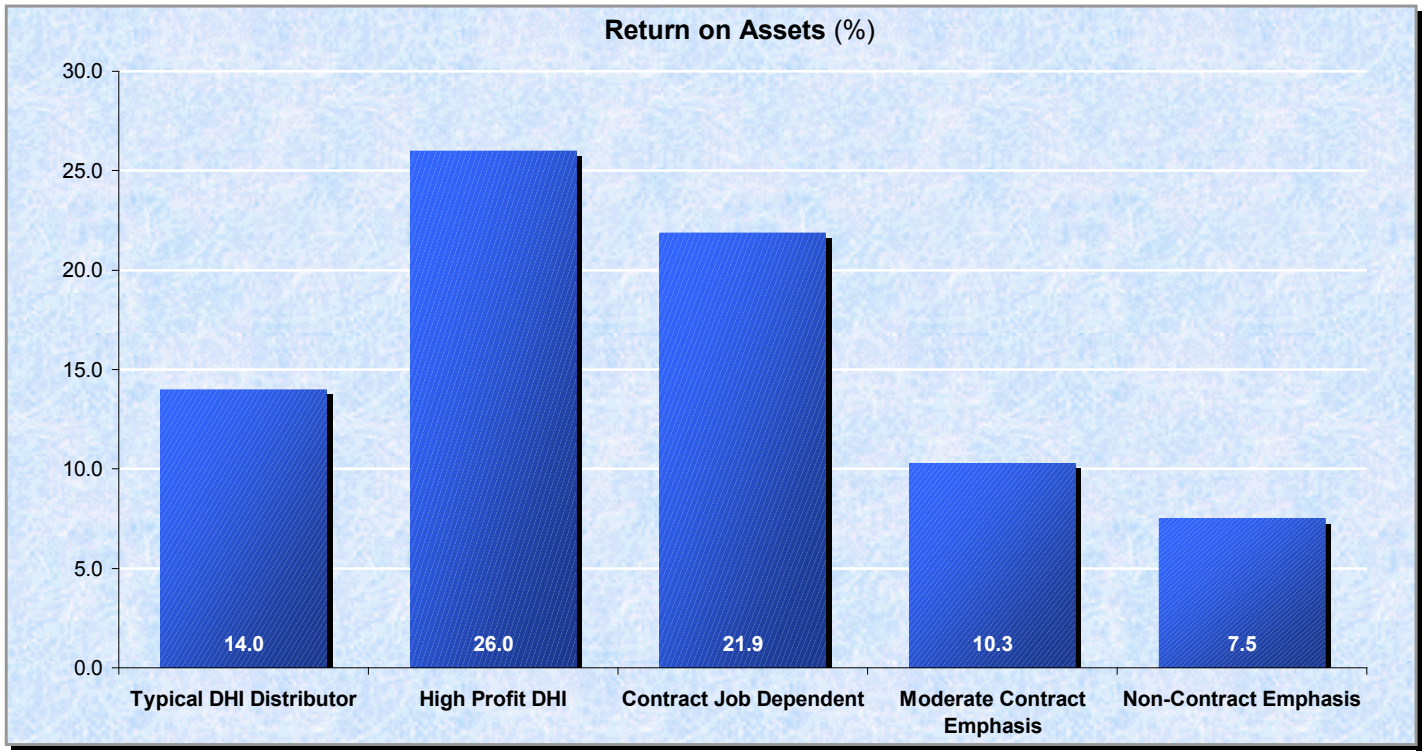
Executive Summary

	Typical DHI Distributor	High Profit DHI
Typical Sales Volume	$19,631,289	$12,929,948
Strategic Profit Model Ratios		
Profit Margin (pre-tax)	5.0%	8.4%
Asset Turnover	2.8	3.1
Return on Assets (pre-tax)	14.0%	26.0%
Financial Leverage	1.6	1.4
Return on Net Worth (pre-tax)	22.4%	36.4%
Income Statement		
Net Sales	**100.0%**	**100.0%**
Cost of Goods Sold	67.7	65.4
Gross Margin	**32.3**	**34.6**
Operating Expenses		
Payroll Expenses	20.6	21.0
Occupancy Expenses	2.2	1.8
Other Operating Expenses	4.2	3.4
Total Operating Expenses	**27.0**	**26.2**
Operating Profit	**5.3**	**8.4**
Other Income/Expenses	-0.3	0.0
Profit Before Taxes	**5.0%**	**8.4%**
Financial Ratios		
Current Ratio	3.1	3.4
Quick Ratio	2.1	2.8
Accounts Payable to Inventory	39.7%	35.5%
Accounts Payable Payout Period (days)	17.9	13.1
Debt to Equity	0.6	0.4
EBIT to Total Assets	12.8%	27.1%
Times Interest Earned	15.0	15.9
Asset Productivity		
Average Collection Period (days)	66.5	68.7
Inventory Turnover (times)	6.7	11.0
Inventory Holding Period (days)	54.2	33.2
Gross Margin Return on Inventory	320.7%	424.7%
Growth & Cash Sufficiency		
Growth Potential Index (GPI)	15.5%	25.4%
Cash Cycle (days)	102.8	88.8
Operations		
Sales per SKU	$9,910	$21,916
Sales per Customer	$52,391	$66,550
Sales per Order	$2,314	$5,942
Employees		
Sales per Employee	$333,914	$369,210
Gross Margin per Employee	$106,343	$115,524
Payroll per Employee	$78,948	$79,805
Personnel Productivity Ratio	63.8%	60.7%

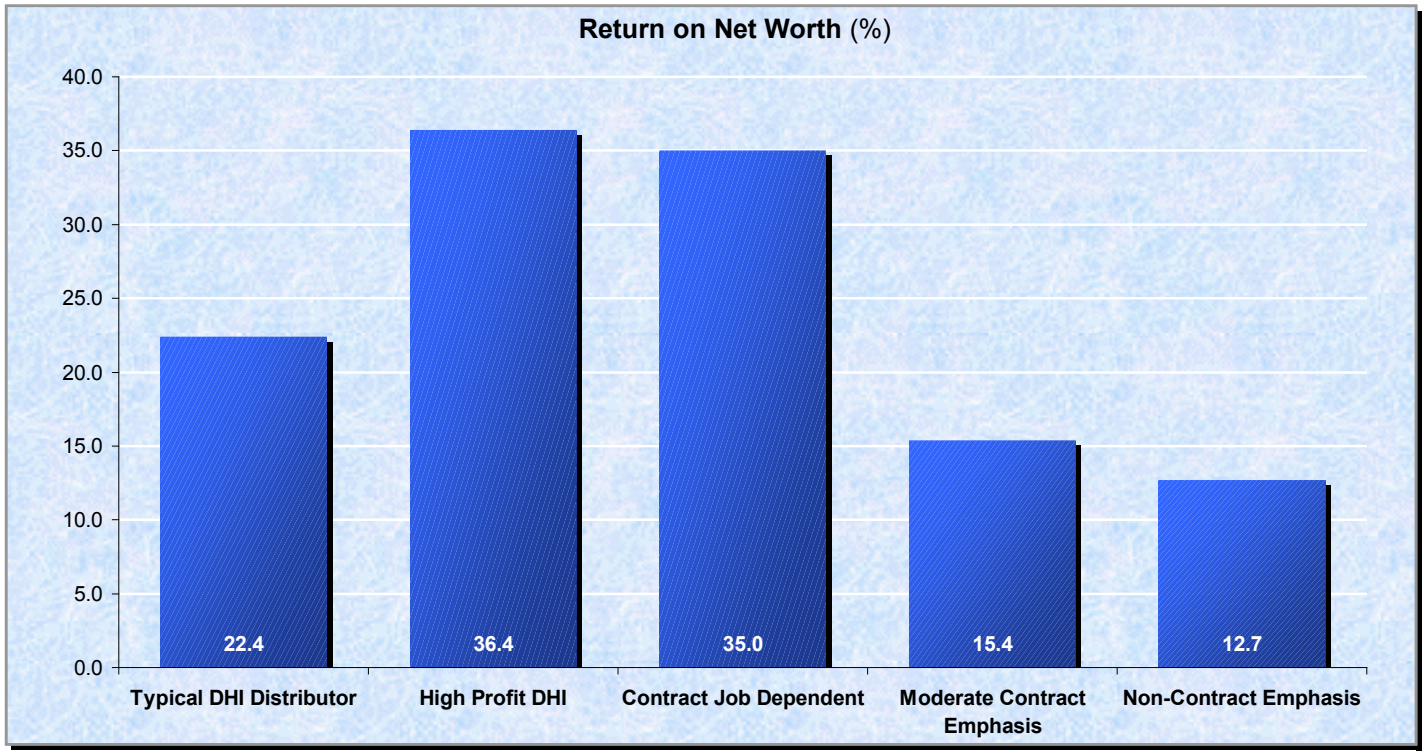
Graphical Analysis

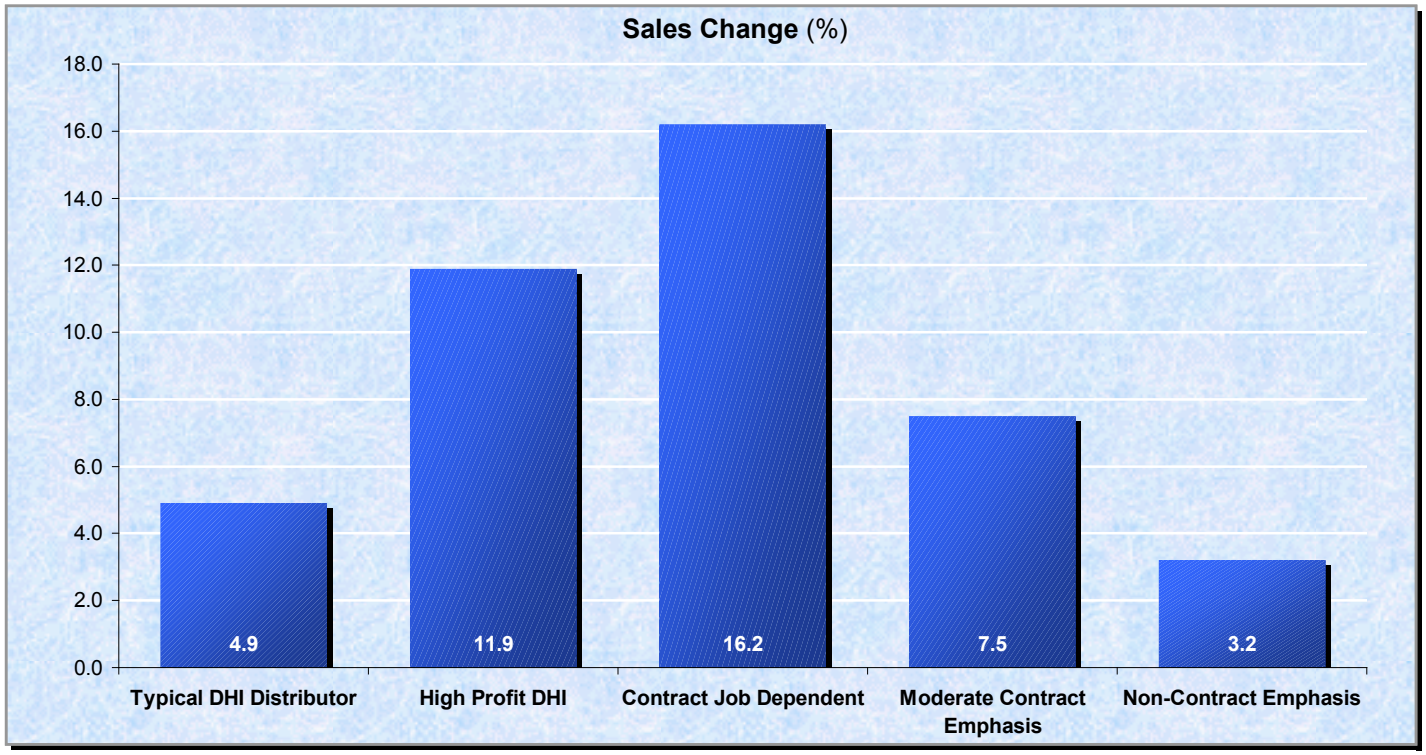
This section graphically presents results for key profitability measures and the factors that drive these results.





Graphical Analysis





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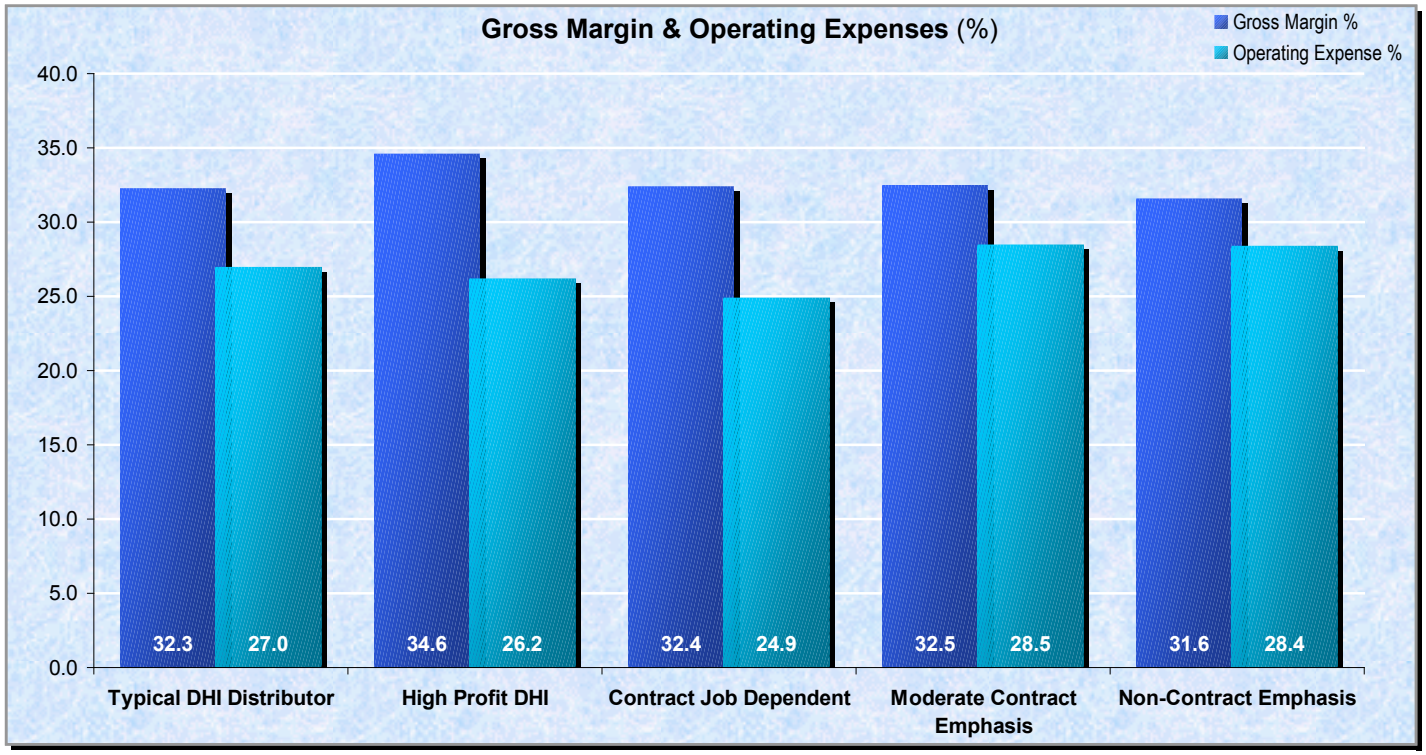

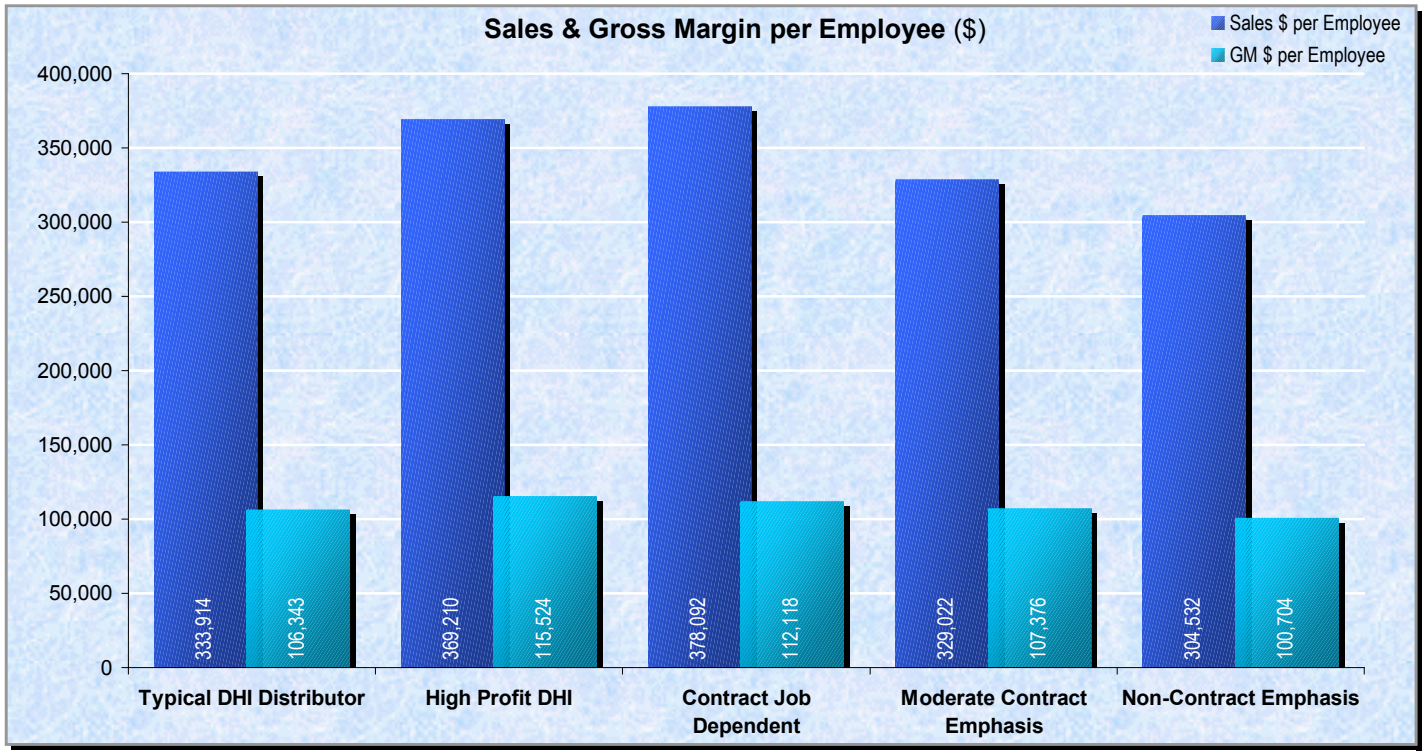

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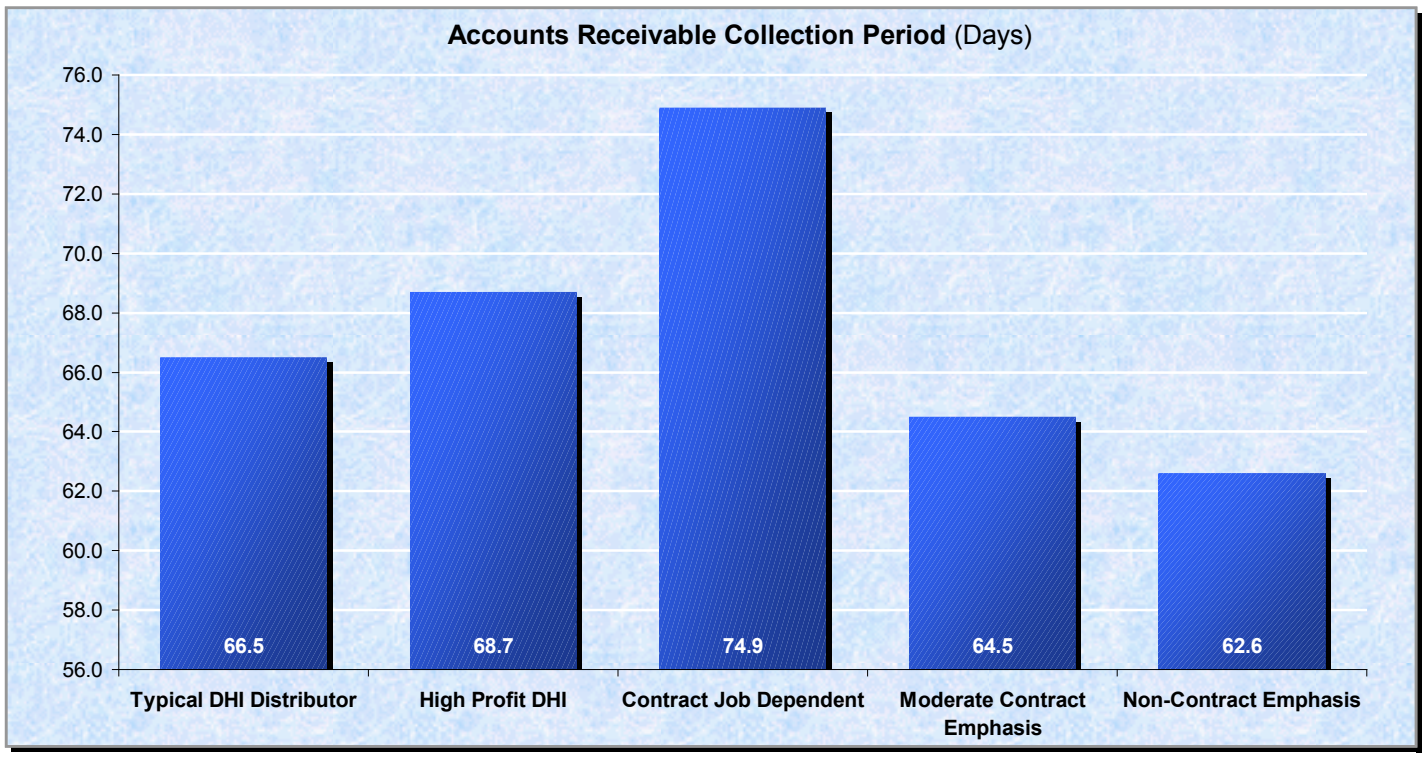
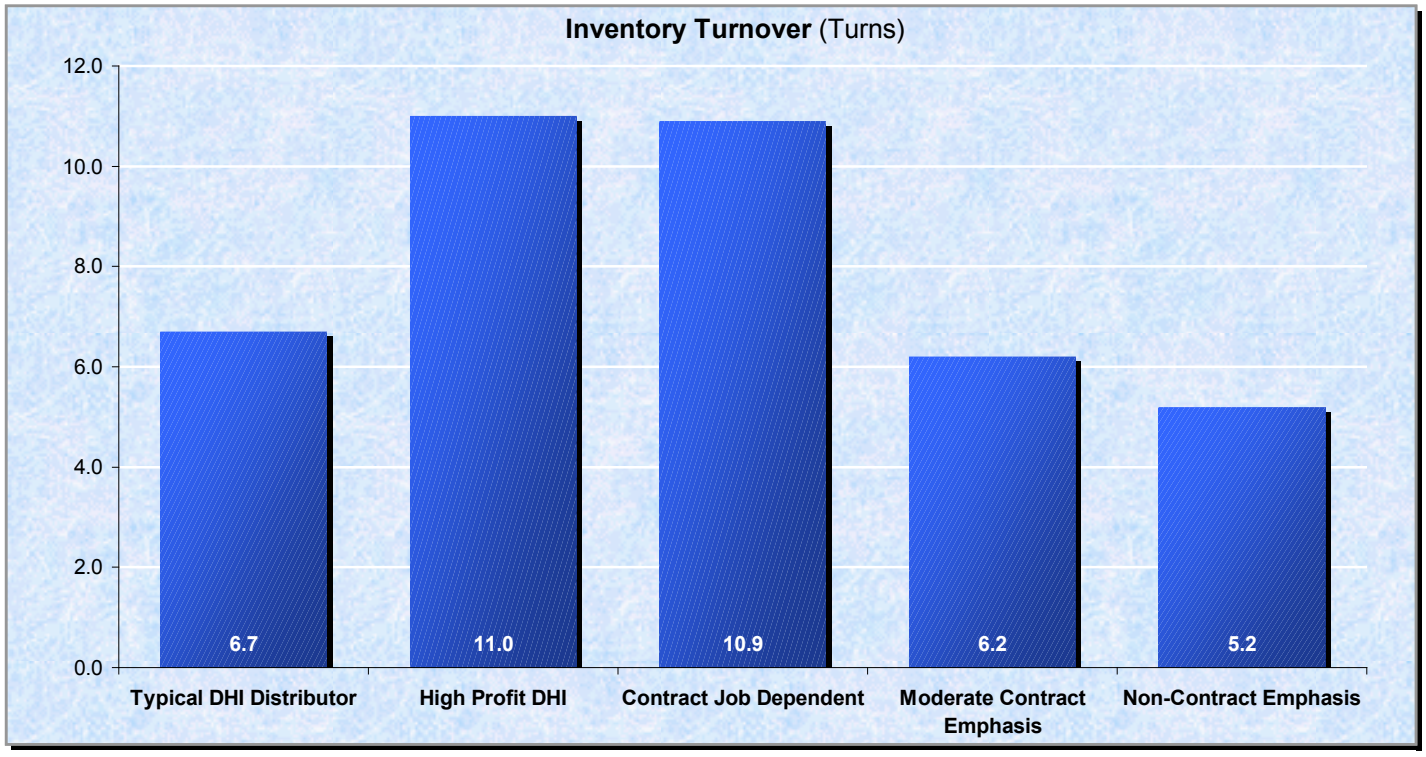




Return on Investment

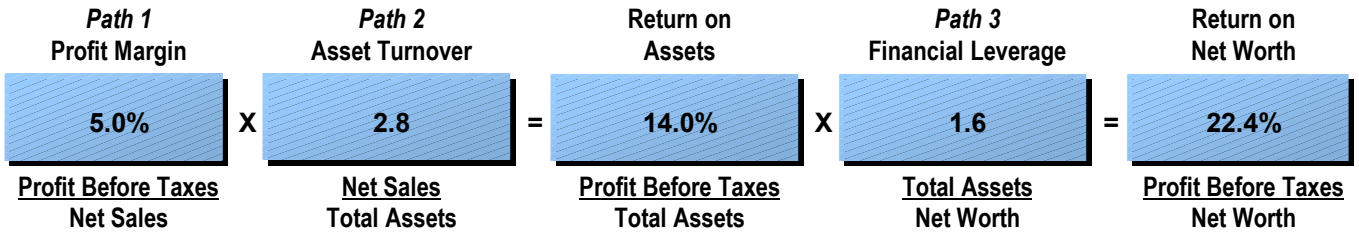
Return on investment is the most meaningful way to evaluate overall business profitability. It is important to understand how return on investment is calculated and how it can be improved.

Strategic Profit Model

There are two distinct return on investment measures: return on assets and return on net worth. **Return on assets** looks at the economic viability of the firm. **Return on net worth** (or return on owner equity) examines the return being generated for the owners. Both have their own value in analyzing performance.

These two return on investment ratios are driven by three performance ratios: **profit margin, asset turnover** and **financial leverage**. Each of these represents a different strategy, or profitability pathway, to improve return on investment.

These five ratios can be combined into what is commonly called the **Strategic Profit Model**. This model is simply a graphical representation of a comprehensive return on investment analysis. The figure below presents the strategic profit model for the typical firm.



***Path 1*: Profit Margin = Profit Before Taxes ÷ Net Sales x 100**
The first, and most important, profitability pathway is profit margin management. In the figure above, a profit margin of 5.0% means that for every $1.00 of sales the business was able to produce 5.0¢ in profit before taxes. Profit margin focuses on revenue, gross margin management and operating expense control.

***Path 2*: Asset Turnover = Net Sales ÷ Total Assets**
Asset turnover reflects the sales the firm produces per dollar invested in assets. The ratio of 2.8 means that the firm is able to generate $2.80 in sales for every $1.00 in assets. If a firm's cash, accounts receivable, inventory, property, equipment, and all other assets can be used as efficiently as possible, then maximum revenue can be generated from a given asset investment.

Return On Assets = Profit Before Taxes ÷ Total Assets x 100
Return on assets (ROA) is the direct result of the first two pathways; profit margin multiplied by asset turnover. This measure of performance is a good indicator of the firm's ability to survive and prosper.

***Path 3*: Financial Leverage = Total Assets ÷ Net Worth**
Financial leverage measures the total dollars of assets per dollar of net worth. The ratio measures the extent to which the firm uses outside (non-owner) financing. The higher the ratio, the more the firm relies on outside financing. The ratio of 1.6 times suggests that for every $1.00 in net worth, the firm had $1.60 in total assets.

Return On Net Worth = Profit Before Taxes ÷ Net Worth x 100
The end result of the three profitability pathways is return on net worth. It is seldom possible to generate an adequate rate of return on net worth by emphasizing just one of the profitability pathways. Each pathway should be examined for improvement opportunities and trade-offs made to increase overall profitability.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Strategic Profit Model Ratios					
Profit Margin (pre-tax %)	5.0	8.4	7.3	3.8	2.6
Asset Turnover	2.8	3.1	3.0	2.7	2.9
Return on Assets (pre-tax %)	14.0	26.0	21.9	10.3	7.5
Financial Leverage	1.6	1.4	1.6	1.5	1.7
Return on Net Worth (pre-tax %)	22.4	36.4	35.0	15.4	12.7

Income Statement

The income statement reflects the ability of management to generate sales at a reasonable margin, control expenses and earn an equitable profit. It serves as the primary scorecard of management's effectiveness.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Number of Firms Reporting	45	10	14	21	6
Typical Sales $ Volume	19,631,289	12,929,948	12,929,948	16,944,598	35,694,288
Sales Change (2015 to 2016 %)	4.9	11.9	16.2	7.5	3.2
Income Statement (% of sales)					
Net Sales	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Cost of Goods Sold					
Materials	64.5	64.2	61.2	64.4	65.3
Direct Labor	2.6	1.2	4.7	2.5	1.9
Other Cost of Goods Sold	0.6	0.0	1.7	0.6	1.2
Total Cost of Goods Sold	**67.7**	**65.4**	**67.6**	**67.5**	**68.4**
Gross Margin	**32.3**	**34.6**	**32.4**	**32.5**	**31.6**
Personnel Expenses					
Executive Salaries & Bonuses	2.8	2.8	2.5	3.2	1.6
Sales Salaries & Commissions	7.3	4.7	4.8	7.7	9.7
Warehouse & Delivery Wages	1.8	2.3	1.8	1.8	1.7
All Other Employee Wages	5.1	7.9	7.4	4.3	5.7
Total Salaries, Wages & Bonuses	17.0	17.7	16.5	17.0	18.7
Payroll Taxes (FICA, workers' comp. & unemp.)	1.4	1.4	1.4	1.6	1.2
Group Insurance (medical, hospitalization, etc.)	1.6	1.4	1.0	1.6	1.8
Employee Benefits (profit sharing, pension, etc.)	0.6	0.5	0.4	0.6	0.2
Total Personnel Expenses	**20.6**	**21.0**	**19.3**	**20.8**	**21.9**
Occupancy Expenses					
Utilities (heat, light, power, water)	0.3	0.2	0.2	0.3	0.3
Telephone	0.2	0.2	0.2	0.3	0.3
Building Repairs & Maintenance	0.2	0.2	0.2	0.2	0.3
Rent or Real Estate Ownership	1.5	1.2	1.3	1.8	1.5
Total Occupancy Expenses	**2.2**	**1.8**	**1.9**	**2.6**	**2.4**
Other Operating Expenses					
Advertising & Promotion	0.1	0.0	0.0	0.1	0.2
Vehicle Expense	0.7	0.7	0.6	0.7	1.1
Insurance (business liability & casualty)	0.4	0.2	0.3	0.5	0.3
Depreciation	0.5	0.5	0.4	0.7	0.2
Bad Debt Losses	0.1	0.1	0.0	0.2	0.1
All Other Operating Expenses	2.4	1.9	2.4	2.9	2.2
Total Other Operating Expenses	**4.2**	**3.4**	**3.7**	**5.1**	**4.1**
Total Operating Expenses	**27.0**	**26.2**	**24.9**	**28.5**	**28.4**
Operating Profit	**5.3**	**8.4**	**7.5**	**4.0**	**3.2**
Other Income	0.0	0.0	0.1	0.0	0.2
Interest Expense	0.3	0.0	0.2	0.2	0.5
Other Non-operating Expenses	0.0	0.0	0.1	0.0	0.3
Profit Before Taxes	**5.0**	**8.4**	**7.3**	**3.8**	**2.6**

Expenses in Relationship to Gross Margin

Gross margin represents the income available after paying for all product purchases. Many firms like to examine expenses in relationship to gross margin. The feeling is that gross margin represents the money available for expenses and profit, so the analysis provides a good basis for control.

One word of caution is in order. Gross margins may vary by an appreciable amount in the industry. Consequently, an expense item that is a low percentage of gross margin may reflect excellent expense control or it may reflect greater success in producing gross margin. The figures must always be viewed in that light.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Expenses In Relation To GM (% of gross profit)					
Gross Margin	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Personnel Expenses					
Executive Salaries & Bonuses	8.6	8.1	7.7	9.8	5.1
Sales Salaries & Commissions	22.6	13.6	14.8	23.7	30.7
Warehouse & Delivery Wages	5.6	6.7	5.6	5.6	5.4
All Other Employee Wages	15.8	22.8	22.8	13.2	18.0
Total Salaries, Wages & Bonuses	52.6	51.2	50.9	52.3	59.2
Payroll Taxes (FICA, workers' comp. & unemp.)	4.3	4.0	4.4	4.9	3.8
Group Insurance (medical, hospitalization, etc.)	5.0	4.0	3.1	4.9	5.7
Employee Benefits (profit sharing, pension, etc.)	1.9	1.5	1.2	1.9	0.6
Total Personnel Expenses	**63.8**	**60.7**	**59.6**	**64.0**	**69.3**
Occupancy Expenses					
Utilities (heat, light, power, water)	0.9	0.6	0.6	0.9	0.9
Telephone	0.6	0.6	0.6	0.9	0.9
Building Repairs & Maintenance	0.6	0.6	0.6	0.6	0.9
Rent or Real Estate Ownership	4.7	3.4	4.1	5.6	4.9
Total Occupancy Expenses	**6.8**	**5.2**	**5.9**	**8.0**	**7.6**
Other Operating Expenses					
Advertising & Promotion	0.3	0.0	0.0	0.3	0.6
Vehicle Expense	2.2	2.0	1.9	2.2	3.5
Insurance (business liability & casualty)	1.2	0.6	0.9	1.5	0.9
Depreciation	1.6	1.5	1.2	2.2	0.6
Bad Debt Losses	0.3	0.2	0.0	0.6	0.3
All Other Operating Expenses	7.4	5.5	7.4	8.9	7.1
Total Other Operating Expenses	**13.0**	**9.8**	**11.4**	**15.7**	**13.0**
Total Operating Expenses	**83.6**	**75.7**	**76.9**	**87.7**	**89.9**
Operating Profit	**16.4**	**24.3**	**23.1**	**12.3**	**10.1**
Other Income	0.0	0.0	0.3	0.0	0.6
Interest Expense	0.9	0.0	0.6	0.6	1.6
Other Non-operating Expenses	0.0	0.0	0.3	0.0	0.9
Profit Before Taxes	**15.5**	**24.3**	**22.5**	**11.7**	**8.2**

Balance Sheet

The balance sheet is an underutilized financial statement. If properly analyzed, it provides significant insights into the financial structure of the firm. This page examines the composition of the balance sheet while the pages that follow derive some key ratios from the balance sheet information.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Typical Total $ Assets	7,011,175	4,170,951	4,309,983	6,275,777	12,308,375
Assets (% of assets)					
Cash & Marketable Securities	4.1	11.0	7.4	5.0	2.9
Trade Accounts Receivable	55.6	59.1	64.1	51.1	43.6
Inventory	28.7	16.9	15.2	30.0	38.7
Other Current Assets	1.7	0.8	2.8	2.3	1.8
Total Current Assets	90.1	87.8	89.5	88.4	87.0
Fixed & Noncurrent Assets	9.9	12.2	10.5	11.6	13.0
Total Assets	100.0	100.0	100.0	100.0	100.0
Liabilities and Net Worth (% of assets)					
Trade Accounts Payable	13.3	11.2	17.4	10.0	14.4
Notes Payable	8.7	5.4	6.8	9.1	12.7
Other Current Liabilities	9.5	10.4	8.9	8.8	13.6
Total Current Liabilities	31.5	27.0	33.1	27.9	40.7
Long Term Liabilities	4.8	0.8	4.3	4.9	1.0
Net Worth or Owner Equity	63.7	72.2	62.6	67.2	58.3
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0	100.0

Financial Ratios

Suppliers, bankers and outside creditors have a wide range of financial ratios at their disposal to measure the overall financial integrity of the firm. The specific ratios that are most commonly used in this process are covered on this page.

Current Ratio = Current Assets ÷ Current Liabilities
The current ratio measures the margin of safety that management maintains in order to allow for the inevitable unevenness in the flow of funds through the current asset and current liability accounts. A company needs a supply of current funds to be assured of being able to pay its bills when they come due.

Quick Ratio = (Cash + Accounts Receivable) ÷ Current Liabilities
Quick assets include cash, marketable securities, and current accounts receivable. Presumably, these items can be converted into cash quickly at approximately their stated amounts, unlike inventory which is the principal current asset excluded from this calculation. The quick ratio is, therefore, a measure of the extent to which liquid resources are readily available to meet current obligations.

Accounts Payable to Inventory = Accounts Payable ÷ Inventory x 100
This ratio measures the extent to which a company's inventory is financed by the suppliers of that inventory. Increasingly, firms are looking to finance a major portion of their inventory via supplier financing.

Accounts Payable Payout Period = Accounts Payable ÷ (Cost of Goods Sold ÷ 365 days)
The accounts payable payout period measures the timeliness of paying suppliers. This figure is related directly to the normal credit terms of the company's purchases.

Debt to Equity = Total Liabilities ÷ Net Worth
The greater the proportion of its financing that is obtained from owners, the less worry the company has in meeting its fixed obligations. At the same time excessive reliance on owner financing slows the rate at which the firm can grow. The debt to equity ratio shows the balance that management has struck between debt and owners' equity.

EBIT to Total Assets = Earnings Before Interest and Taxes ÷ Total Assets x 100
EBIT to total assets is a return on investment ratio that provides a profit analysis based on earnings before interest and income taxes. This ratio is best compared with a company's annual interest rate on borrowed funds.

Times Interest Earned = (Profit Before Taxes + Interest) ÷ Interest
The times interest earned ratio measures the number of times profit before interest and taxes will cover total interest payments on debt. The result indicates the level to which income can decline without impairing the company's ability to meet interest payments on its liabilities.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Financial Ratios					
Current Ratio	3.1	3.4	2.8	3.1	2.6
Quick Ratio	2.1	2.8	1.8	2.4	1.6
Accounts Payable to Inventory (%)	39.7	35.5	116.7	38.4	28.7
Accounts Payable Payout Period (days)	17.9	13.1	18.7	16.4	18.9
Debt to Equity	0.6	0.4	0.6	0.5	0.7
EBIT to Total Assets (%)	12.8	27.1	20.0	11.6	9.7
Times Interest Earned	15.0	15.9	17.1	15.0	6.5

Asset Productivity

Given the significance of both accounts receivable and inventory, it is important to measure the productivity of these asset investments using the ratios on this page. For both of these asset categories the objective is not necessarily to minimize their value. Rather, the objective is to utilize both for maximum profitability.

Average Collection Period = Accounts Receivable ÷ (Credit Sales ÷ 365 days)
The average collection period can be evaluated against the credit terms offered by the company. As a rule, the collection period should not exceed 1 1/3 times the regular payment period. That is, if your company's typical terms call for payment in 30 days, then the collection period should not exceed 40 days.

Inventory Turnover = Cost of Goods Sold ÷ Inventory
Inventory turnover is an indication of the velocity with which merchandise dollars move through the business. In the case of the typical member, the turnover figure of 6.7 means that the firm sells out the equivalent of its inventory value 6.7 times per year.

Inventory Holding Period = 365 days ÷ Inventory Turnover
The inventory holding period reflects how many days of inventory are on hand. That is, it shows how long it should take to sell off the existing inventory. Business managers and owners must be concerned with a holding period that is longer than necessary due to the high costs of capital tied up in excess inventory. On the other hand, reducing inventory levels too much could result in lost sales if certain products are not available when the customer wants them. The cost of carrying inventory has to be balanced against the profit opportunities lost by not having product in stock ready for sale.

Sales to Inventory Ratio = Net Sales ÷ Inventory at Cost
The sales to inventory ratio is another method for measuring how quickly inventory turns over in the company. It demonstrates how much sales volume is produced per dollar of inventory investment. The figure of 9.6 for the typical member indicates that the firm generates $9.60 of sales annually for each dollar tied up in inventory.

Gross Margin Return on Inventory = Gross Profit ÷ Inventory x 100
The basic objective of Gross Margin Return on Inventory (GMROI) is to view the inventory from a return on investment perspective. Consequently, the ratio measures how many gross margin dollars are produced from each dollar invested in inventory. GMROI facilitates the evaluation of products with widely varying gross margin and inventory utilization rates.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Collections					
Cash Sales (% of net sales)	4.0	2.6	1.4	5.0	4.0
Average Collection Period (days)	66.5	68.7	74.9	64.5	62.6
Bad Debt Losses (% of net sales)	0.1	0.1	0.0	0.2	0.1
Inventory					
Inventory Turnover	6.7	11.0	10.9	6.2	5.2
Inventory Holding Period (days)	54.2	33.2	33.5	59.0	70.5
Sales to Inventory Ratio	9.6	16.3	16.3	9.2	7.6
Gross Margin Return on Inventory (%)	320.7	424.7	544.9	295.2	243.6
Sales Path (% of sales)					
Warehouse Sales	90.0	90.0	89.5	90.0	92.5
Direct Shipments	10.0	10.0	10.5	10.0	7.5
Total Sales	100.0	100.0	100.0	100.0	100.0

Growth & Cash Sufficiency

Most firms are anxious to expand their sales base. As they do so, however, cash flow becomes a major issue. Ideally, firms would like to have enough cash to fund expansion and to provide a buffer in the event of a cyclical slowdown in the industry. At the same time, no firm wants excessive cash balances remaining idle.

This section examines cash sufficiency utilizing a number of financial ratios, most of that are not well understood. However, these ratios provide insight into how fast the firm can grow, the cash flow required for additional sales growth and ways to enhance growth with existing cash balances.

Cash Cycle = Average Collection Period + Inventory Holding Period - Accounts Payable Payout Period
The cash cycle determines the number of days of investment in a product from the time it is purchased from the supplier until the sales invoice is collected from the customer. Anything that can be done to shorten this period facilitates sales growth without additional outside investment. All three of the components of this ratio were covered on the preceding two pages.

Growth Potential Index = Profit After Taxes ÷ (Accounts Receivable + Inventory - Accounts Payable)
The Growth Potential Index (GPI) measures approximately how fast the firm can increase its sales each year using only internally generated funds. Increasing sales faster than the growth potential index will reduce cash on hand. Increasing sales slower than the growth potential index will create additional cash reserves.

Cash to Current Liabilities = Cash ÷ Current Liabilities x 100
This is the most stringent test of the ability of the firm to meet its short-term obligations with existing cash balances.

Defensive Interval = Cash ÷ (Operating Expenses other than Depreciation ÷ 365 days)
The defensive interval measures how long the firm can operate using nothing but existing cash balances. It provides a worst-case analysis of the adequacy of the firm's cash position if sales and collections suddenly deteriorated.

Sales to Working Capital = Net Sales ÷ (Current Assets - Current Liabilities)
Measures the ability of the firm to generate sales without tying up high levels of investment in working capital. A ratio of 4.9, for example, means the firm can generate $4.90 in sales for every $1.00 invested in working capital. This ratio can be improved by changes in any of the three working capital variables—improving inventory turnover, reducing accounts receivable collections or obtaining more favorable accounts payable payment terms.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Cash Flow Cycle					
Average Collection Period (days)	66.5	68.7	74.9	64.5	62.6
Plus Inventory Holding Period (days)	54.2	33.2	33.5	59.0	70.5
Gross Cash Flow (days)	120.7	101.9	108.4	123.5	133.1
Minus A/P Payout Period (days)	17.9	13.1	18.7	16.4	18.9
Cash Cycle (days)	102.8	88.8	89.7	107.1	114.2
Growth & Cash Sufficiency					
Growth Potential Index (%)	15.5	25.4	22.2	13.2	N/A
Cash to Current Liabilities (%)	11.1	14.4	13.2	10.1	5.6
Defensive Interval (days)	14.1	27.9	16.3	19.8	7.1
Sales to Working Capital	4.9	4.6	5.1	4.7	5.1

Operations

Operational issues are frequently overlooked as determinants of profitability. The following ratios measure operational performance.

Sales per SKU = Net Sales ÷ Number of Stockkeeping Units
A stockkeeping unit (SKU) is a single item defined as narrowly as possible, considering characteristics such as size, color, manufacturer, style and the like. Two items purchased from the same supplier that are the same size, but different colors, are two distinct SKUs. The ability to produce a high level of sales per SKU suggests that the firm has simplified its operations for maximum productivity.

Inventory per SKU = Inventory ÷ Number of SKUs
The critical role of inventory is to provide the maximum level of customer service. This is usually achieved by carrying a high level of inventory behind each item sold.

Sales per Customer = Net Sales ÷ Number of Active Customers
If the firm can generate adequate sales per customer it can minimize the amount of time and expense it incurs in finding additional customers. A high sales per customer also suggests a more effective use of delivery vehicles and other operating assets. Active customers are those making six or more purchases annually.

Sales per Order = Net Sales ÷ Number of Orders Shipped
Processing, filling and delivering a customer order involves a large amount of expense that is the same regardless of invoice size. The higher the sales per order, the more able the firm is to cover these fixed expenses with the additional gross margin dollars generated on the sale.

Sales per Order Line = Net Sales ÷ Number of Lines per Order
Processing orders also involves a relatively fixed cost per order line. Increasing the line value also enables the firm to cover fixed costs more profitably.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
Shipments Received (monthly avg.)	380	123	194	400	800
Sales $ per Shipment Received	3,153	6,730	5,502	2,462	4,062
Stockkeeping Units (SKUs)	1,269	752	500	1,500	9,150
Sales $ per SKU	9,910	21,916	26,446	9,618	4,411
Inventory $ per SKU	977	1,371	1,575	888	472
Customers	200	150	105	357	750
Sales $ per Customer	52,391	66,550	146,219	45,503	47,563
Orders Shipped (monthly avg.)	450	283	185	473	3,652
Sales $ per Order	2,314	5,942	6,266	2,069	1,347
Lines per Order (avg.)	8.0	8.5	11.0	6.0	6.5
Sales $ per Order Line	369	648	575	361	179
Product Sales (% of sales)					
Builders Hardware	45.1	41.0	38.6	48.4	48.1
Electronic Hardware	6.2	4.8	6.3	4.9	10.3
Metal Doors & Related Products	20.0	23.1	21.1	20.9	14.4
Wood Doors & Frames	16.3	21.7	20.4	16.2	7.9
Toilet Accessories & Partitions	4.4	4.6	4.0	4.4	5.3
Other	8.0	4.8	9.6	5.2	14.0
Total Sales	100.0	100.0	100.0	100.0	100.0
Type of Sale (% of sales)					
Contract Jobs	68.0	88.0	91.5	66.0	49.0
Non-Contract Sales	32.0	12.0	8.5	34.0	51.0
Total Sales	100.0	100.0	100.0	100.0	100.0
Manufacturers	140	110	94	140	200
Sales $ per Manufacturer	112,754	152,079	118,734	94,458	176,909

Employees

Employees are the lifeblood of the organization. Without a properly motivated and compensated workforce, few firms can produce much more than basic levels of performance. Employee payroll costs make up the single largest expense category on the income statement.

In controlling employee payroll, the key to success is not the absolute level of compensation, but rather the productivity of employees. The two key employee productivity ratios presented in this report are sales per employee and the personnel productivity ratio. Both ratios are measures of employee output.

Sales per Employee = Net Sales ÷ Total Full-Time Equivalent Employees
This is simply the level of sales generated per full-time equivalent (FTE) employee. The ratio provides a means to estimate how many additional employees will be required as the firm expands its sales base.

Personnel Productivity Ratio = Payroll Expense ÷ Gross Margin x 100
The personnel productivity ratio (PPR) expresses total payroll expense as a percentage of gross margin. Total payroll includes not only salaries and wages, but also all payroll taxes, insurance coverage and other fringe benefits. The ratio measures the portion of each gross margin dollar that must be committed to payroll. This is one of the few productivity ratios where a lower figure is desirable.

	Typical DHI Distributor	High Profit DHI	Contract Job Dependent	Moderate Contract Emphasis	Non-Contract Emphasis
FTE Employees	51.0	35.3	37.0	45.0	125.0
Sales $ per Employee	333,914	369,210	378,092	329,022	304,532
Gross Margin $ per Employee	106,343	115,524	112,118	107,376	100,704
Salary $ per Employee	67,753	68,280	69,353	61,018	53,702
Payroll $ per Employee	78,948	79,805	83,237	78,583	62,740
Payroll Expense (% of sales)	23.2	22.2	24.0	23.3	23.8
Benefits (% of total payroll)	14.3	15.5	14.2	13.9	18.4
Personnel Productivity Ratio (%)	63.8	60.7	59.6	64.0	69.3
Direct Labor Employees					
Firms With Direct Labor Employees (% of firms)	78.0	60.0	71.4	81.0	83.3
Direct Labor FTEs (at firms with them)	13.0	11.0	9.5	13.0	28.0

Sales Volume

	Sales Under $10 Million	Sales $10 - $25 Million	Sales Over $25 Million
Number of Firms Reporting	12	16	13
Typical Sales $ Volume	6,371,451	19,130,589	32,035,000
Sales Change (2015 to 2016 %)	1.9	9.9	6.5
Strategic Profit Model Ratios			
Profit Margin (pre-tax %)	4.6	5.3	5.0
Asset Turnover	3.2	2.8	2.5
Return on Assets (pre-tax %)	14.7	14.8	12.5
Financial Leverage	1.9	1.4	1.9
Return on Net Worth (pre-tax %)	27.9	20.7	23.7
Income Statement (% of sales)			
Net Sales	**100.0**	**100.0**	**100.0**
Cost of Goods Sold			
Materials	62.5	62.8	66.7
Direct Labor	3.9	2.6	1.9
Other Cost of Goods Sold	0.7	0.6	0.9
Total Cost of Goods Sold	**67.1**	**66.0**	**69.5**
Gross Margin	**32.9**	**34.0**	**30.5**
Personnel Expenses			
Executive Salaries & Bonuses	2.8	3.8	1.5
Sales Salaries & Commissions	8.8	5.5	8.5
Warehouse & Delivery Wages	1.8	2.5	1.1
All Other Employee Wages	3.6	6.6	5.8
Total Salaries, Wages & Bonuses	17.0	18.4	16.9
Payroll Taxes (FICA, workers' comp. & unemp.)	1.4	1.5	1.2
Group Insurance (medical, hospitalization, etc.)	1.6	1.9	0.8
Employee Benefits (profit sharing, pension, etc.)	0.6	0.7	0.3
Total Personnel Expenses	**20.6**	**22.5**	**19.2**
Occupancy Expenses			
Utilities (heat, light, power, water)	0.3	0.3	0.3
Telephone	0.3	0.2	0.3
Building Repairs & Maintenance	0.2	0.2	0.2
Rent or Real Estate Ownership	1.9	1.4	1.3
Total Occupancy Expenses	**2.7**	**2.1**	**2.1**
Other Operating Expenses			
Advertising & Promotion	0.1	0.1	0.2
Vehicle Expenses	0.8	0.7	0.5
Insurance (business liability & casualty)	0.5	0.3	0.3
Depreciation	0.9	0.4	0.5
Bad Debt Losses	0.1	0.1	0.1
All Other Operating Expenses	2.3	2.6	2.4
Total Other Operating Expenses	**4.7**	**4.2**	**4.0**
Total Operating Expenses	**28.0**	**28.8**	**25.3**
Operating Profit	**4.9**	**5.2**	**5.2**
Other Income	0.0	0.3	0.2
Interest Expense	0.2	0.2	0.4
Other Non-operating Expenses	0.1	0.0	0.0
Profit Before Taxes	**4.6**	**5.3**	**5.0**

Sales Volume

	Sales Under $10 Million	Sales $10 - $25 Million	Sales Over $25 Million
Expenses in Relationship to GM (% of gross profit)			
Gross Margin	**100.0**	**100.0**	**100.0**
Personnel Expenses			
Executive Salaries & Bonuses	8.5	11.2	4.9
Sales Salaries & Commissions	26.8	16.2	27.9
Warehouse & Delivery Wages	5.5	7.3	3.6
All Other Employee Wages	10.9	19.4	19.0
Total Salaries, Wages & Bonuses	51.7	54.1	55.4
Payroll Taxes (FICA, workers' comp. & unemp.)	4.2	4.4	4.0
Group Insurance (medical, hospitalization, etc.)	4.9	5.6	2.6
Employee Benefits (profit sharing, pension, etc.)	1.8	2.1	1.0
Total Personnel Expenses	**62.6**	**66.2**	**63.0**
Occupancy Expenses			
Utilities (heat, light, power, water)	0.9	0.9	1.0
Telephone	0.9	0.6	1.0
Building Repairs & Maintenance	0.6	0.6	0.7
Rent or Real Estate Ownership	5.8	4.1	4.2
Total Occupancy Expenses	**8.2**	**6.2**	**6.9**
Other Operating Expenses			
Advertising & Promotion	0.3	0.3	0.7
Vehicle Expense	2.4	2.1	1.6
Insurance (business liability & casualty)	1.5	0.9	1.0
Depreciation	2.8	1.2	1.6
Bad Debt Losses	0.3	0.3	0.3
All Other Operating Expenses	7.0	7.5	7.9
Total Other Operating Expenses	**14.3**	**12.3**	**13.1**
Total Operating Expenses	**85.1**	**84.7**	**83.0**
Operating Profit	**14.9**	**15.3**	**17.0**
Other Income	0.0	0.9	0.7
Interest Expense	0.6	0.6	1.3
Other Non-operating Expenses	0.3	0.0	0.0
Profit Before Taxes	**14.0**	**15.6**	**16.4**

Sales Volume

	Sales Under $10 Million	Sales $10 - $25 Million	Sales Over $25 Million
Typical Total $ Assets	1,991,078	6,832,353	12,814,000
Balance Sheet (% of assets)			
Assets			
Cash & Marketable Securities	8.1	4.9	3.5
Trade Accounts Receivable	42.8	57.4	53.8
Inventory	34.5	26.5	24.1
Other Current Assets	1.3	1.8	4.2
Total Current Assets	86.7	90.6	85.6
Fixed & Noncurrent Assets	13.3	9.4	14.4
Total Assets	100.0	100.0	100.0
Liabilities and Net Worth			
Trade Accounts Payable	12.4	8.8	18.6
Notes Payable	18.8	7.2	11.0
Other Current Liabilities	11.0	7.3	13.3
Total Current Liabilities	42.2	23.3	42.9
Long Term Liabilities	4.9	4.5	5.1
Net Worth or Owner Equity	52.9	72.2	52.0
Total Liabilities & Net Worth	100.0	100.0	100.0
Financial Ratios			
Current Ratio	2.0	4.2	2.0
Quick Ratio	1.2	3.3	1.5
Accounts Payable to Inventory (%)	33.9	37.6	45.6
Accounts Payable Payout Period (days)	13.5	14.8	23.0
Debt to Equity	0.9	0.4	0.9
EBIT to Total Assets (%)	12.8	11.2	13.5
Times Interest Earned	15.0	18.9	9.3
Asset Productivity			
Cash Sales (% of total sales)	5.0	3.5	1.0
Average Collection Period (days)	49.8	75.4	72.9
Bad Debt Losses (% of net sales)	0.1	0.1	0.1
Inventory Turnover	6.8	7.6	5.7
Inventory Holding Period (days)	54.0	47.9	63.5
Sales to Inventory Ratio	9.5	11.4	8.5
Gross Margin Return on Inventory (%)	273.1	375.5	274.6
Sales Path (% of sales)			
Warehouse Sales	90.0	92.9	90.0
Direct Shipments	10.0	7.1	10.0
Total Sales	100.0	100.0	100.0
Cash Flow Cycle			
Average Collection Period (days)	49.8	75.4	72.9
Plus Inventory Holding Period (days)	54.0	47.9	63.5
Gross Cash Flow (days)	103.8	123.3	136.4
Minus A/P Payout Period (days)	13.5	14.8	23.0
Cash Cycle (days)	90.3	108.5	113.4
Growth & Cash Sufficiency			
Growth Potential Index (%)	16.0	11.7	16.2
Cash to Current Liabilities (%)	10.5	15.9	4.8
Defensive Interval (days)	25.1	19.7	13.0
Sales to Working Capital	7.6	4.1	5.3

Sales Volume

	Sales Under $10 Million	Sales $10 - $25 Million	Sales Over $25 Million
Shipments Received (monthly avg.)	198	420	500
Sales $ per Shipment Received	2,082	3,001	4,008
Stockkeeping Units (SKUs)	924	1,200	5,000
Sales $ per SKU	8,124	14,417	8,666
Inventory $ per SKU	969	942	1,133
Customers	145	322	500
Sales $ per Customer	44,527	62,930	84,818
Orders Shipped (monthly avg.)	225	649	1,804
Sales $ per Order	3,034	2,214	2,373
Lines per Order (avg.)	8.0	7.0	8.0
Sales $ per Order Line	361	486	318
Product Sales (% of sales)			
Builders Hardware	43.6	48.3	42.5
Electronic Hardware	6.1	4.1	8.9
Metal Doors & Related Products	23.5	20.7	15.5
Wood Doors & Frames	17.6	18.0	13.0
Toilet Accessories & Partitions	3.6	3.1	7.0
Other	5.6	5.8	13.1
Total Sales	100.0	100.0	100.0
Type of Sale (% of sales)			
Contract Jobs	67.5	71.8	65.0
Non-Contract Sales	32.5	28.2	35.0
Total Sales	100.0	100.0	100.0
Manufacturers	75	150	200
Sales $ per Manufacturer	92,795	116,000	196,768
FTE Employees	20.5	51.0	112.5
Sales $ per Employee	326,803	332,054	337,252
Gross Margin $ per Employee	111,729	106,343	101,859
Salary $ per Employee	68,009	65,898	60,933
Payroll $ per Employee	79,805	81,132	69,442
Payroll Expense (% of sales)	24.5	25.1	21.1
Benefits (% of total payroll)	14.7	15.5	12.8
Personnel Productivity Ratio	62.6	66.2	63.0
Direct Labor Employees			
Firms With Direct Labor Employees (% of firms)	83.3	75.0	76.9
Direct Labor FTEs (at firms with them)	6.0	15.0	25.5

Regions

To analyze regional performance, firms were grouped into the following DHI regions plus Canada. Use caution when evaluating results with small samples. Results are suppressed for regions with insufficient samples.

Northeastern Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania (Harrisburg and east), Rhode Island, Vermont

Southeastern Alabama, Arkansas, Bahaman Islands, District of Columbia, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Panama, Puerto Rico, South Carolina, Tennessee, Texas (except El Paso), Virginia

North Central Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana (Miles City and north, east of Great Falls), Nebraska, North Dakota, Ohio, Pennsylvania (West of Harrisburg), South Dakota, West Virginia, Wisconsin

Western Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana (south of Miles City, east of Butte), Nevada, New Mexico, Oregon, Texas (El Paso only), Utah, Washington, Wyoming

	North-eastern	South-eastern	North Central	Western	Canada
Number of Firms Reporting	2	11	20	4	4
Typical Sales $ Volume		13,506,180	20,534,080	15,933,718	30,562,799
Sales Change (2015 to 2016 %)		9.8	4.3	10.6	9.2
Income Statement (% of sales)					
Net Sales		**100.0**	**100.0**	**100.0**	**100.0**
Cost of Goods Sold					
Materials		62.2	66.9	62.6	62.4
Direct Labor		3.9	3.6	3.0	1.5
Other Cost of Goods Sold		1.4	0.7	0.0	3.6
Total Cost of Goods Sold		**67.5**	**71.2**	**65.6**	**67.5**
Gross Margin		**32.5**	**28.8**	**34.4**	**32.5**
Personnel Expenses					
Executive Salaries & Bonuses		2.9	2.2	N/A	1.6
Sales Salaries & Commissions		7.6	5.5	N/A	11.2
Warehouse & Delivery Wages		2.1	1.3	N/A	1.2
All Other Employee Wages		4.1	6.0	N/A	3.2
Total Salaries, Wages & Bonuses		16.7	15.0	17.2	17.2
Payroll Taxes (FICA, workers' comp. & unemp.)		1.4	1.3	1.8	0.8
Group Insurance (medical, hospitalization, etc.)		1.7	1.6	1.4	0.5
Employee Benefits (profit sharing, pension, etc.)		0.2	0.8	0.4	0.5
Total Personnel Expenses		**20.0**	**18.7**	**20.8**	**19.0**
Occupancy Expenses					
Utilities (heat, light, power, water)		0.2	0.3	0.2	0.3
Telephone		0.2	0.2	0.3	0.3
Building Repairs & Maintenance		0.2	0.2	0.2	0.2
Rent or Real Estate Ownership		1.2	1.5	1.1	2.2
Total Occupancy Expenses		**1.8**	**2.2**	**1.8**	**3.0**
Other Operating Expenses					
Advertising & Promotion		0.0	0.1	0.1	0.2
Vehicle Expenses		0.7	0.7	0.5	0.6
Insurance (business liability & casualty)		0.3	0.4	0.3	0.1
Depreciation		0.5	0.6	0.3	0.5
Bad Debt Losses		0.0	0.1	0.1	0.3
All Other Operating Expenses		2.3	2.6	2.3	2.8
Total Other Operating Expenses		**3.8**	**4.5**	**3.6**	**4.5**
Total Operating Expenses		**25.6**	**25.4**	**26.2**	**26.5**
Operating Profit		**6.9**	**3.4**	**8.2**	**6.0**
Other Income		0.0	0.1	0.6	0.0
Interest Expense		0.1	0.3	0.2	0.6
Other Non-operating Expenses		0.0	0.0	0.1	1.2
Profit Before Taxes		**6.8**	**3.2**	**8.5**	**4.2**

Regions

	North-eastern	South-eastern	North Central	Western	Canada
Number of Firms Reporting	2	11	20	4	4
Expenses in Relation to GM (% of gross profit)					
Gross Margin		**100.0**	**100.0**	**100.0**	**100.0**
Personnel Expenses					
Executive Salaries & Bonuses		8.9	7.6	N/A	4.9
Sales Salaries & Commissions		23.4	19.1	N/A	34.5
Warehouse & Delivery Wages		6.5	4.5	N/A	3.7
All Other Employee Wages		12.6	20.9	N/A	9.9
Total Salaries, Wages & Bonuses		51.4	52.1	50.0	53.0
Payroll Taxes (FICA, workers' comp. & unemp.)		4.3	4.5	5.2	2.5
Group Insurance (medical, hospitalization, etc.)		5.2	5.6	4.1	1.5
Employee Benefits (profit sharing, pension, etc.)		0.6	2.8	1.2	1.5
Total Personnel Expenses		**61.5**	**65.0**	**60.5**	**58.5**
Occupancy Expenses					
Utilities (heat, light, power, water)		0.6	1.0	0.6	0.9
Telephone		0.6	0.7	0.9	0.9
Building Repairs & Maintenance		0.6	0.7	0.6	0.6
Rent or Real Estate Ownership		3.7	5.2	3.1	6.8
Total Occupancy Expenses		**5.5**	**7.6**	**5.2**	**9.2**
Other Operating Expenses					
Advertising & Promotion		0.0	0.3	0.3	0.6
Vehicle Expense		2.2	2.5	1.4	1.9
Insurance (business liability & casualty)		0.9	1.4	0.9	0.3
Depreciation		1.6	2.1	0.9	1.5
Bad Debt Losses		0.0	0.3	0.3	0.9
All Other Operating Expenses		7.1	9.0	6.7	8.6
Total Other Operating Expenses		**11.8**	**15.6**	**10.5**	**13.8**
Total Operating Expenses		**78.8**	**88.2**	**76.2**	**81.5**
Operating Profit		**21.2**	**11.8**	**23.8**	**18.5**
Other Income		0.0	0.3	1.8	0.0
Interest Expense		0.3	1.0	0.6	1.9
Other Non-operating Expenses		0.0	0.0	0.3	3.7
Profit Before Taxes		**20.9**	**11.1**	**24.7**	**12.9**
Strategic Profit Model Ratios					
Profit Margin (pre-tax %)		6.8	3.2	8.5	4.2
Asset Turnover		2.9	2.8	2.3	2.3
Return on Assets (pre-tax %)		19.7	9.0	19.5	9.7
Financial Leverage		1.6	1.5	1.2	2.0
Return on Net Worth (pre-tax %)		31.5	13.5	23.4	19.4

Regions

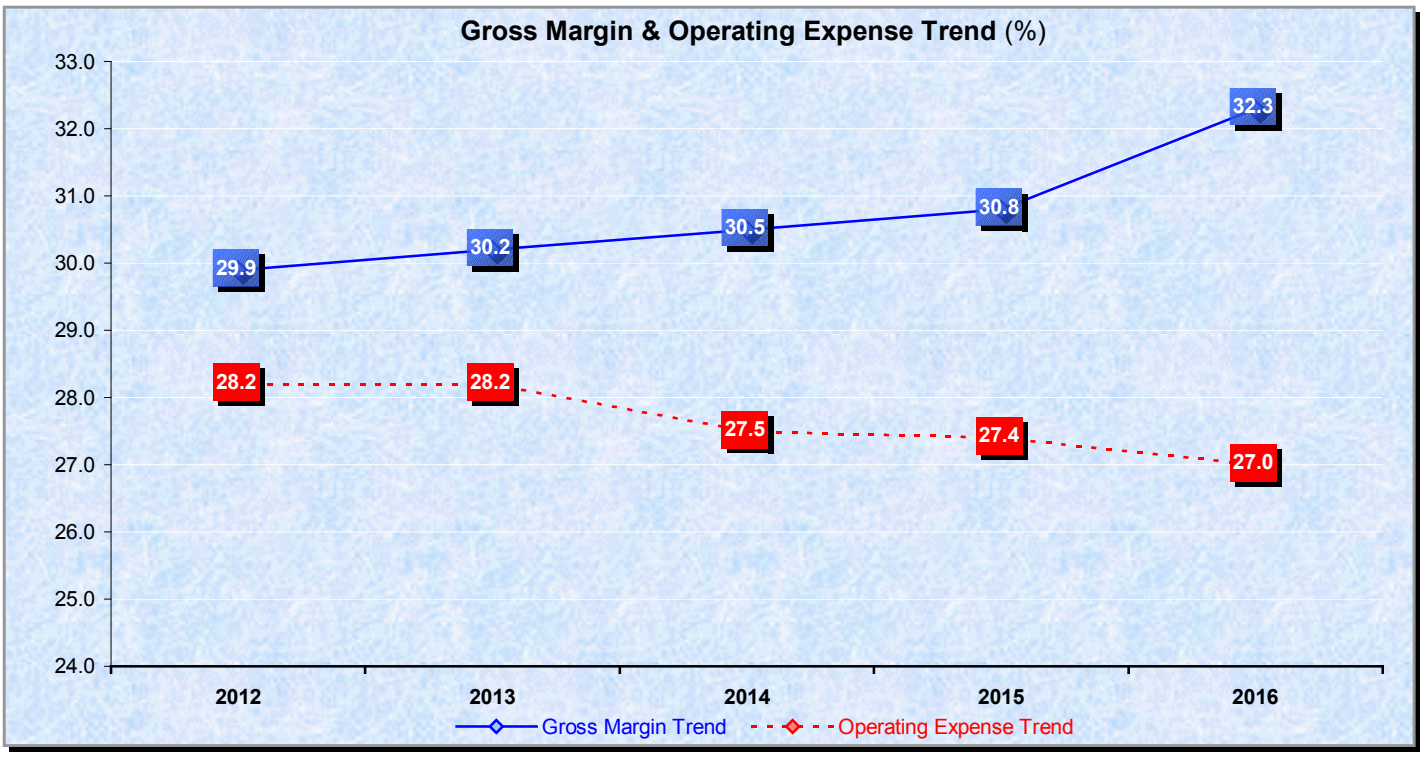
	North-eastern	South-eastern	North Central	Western	Canada
Number of Firms Reporting	2	11	20	4	4
Typical Total $ Assets		4,657,303	7,333,600	6,927,703	13,288,173
Balance Sheet (% of assets)					
Assets					
Cash & Marketable Securities		5.0	12.6	5.7	0.0
Trade Accounts Receivable		56.2	48.8	64.1	55.5
Inventory		24.3	24.5	21.6	32.1
Other Current Assets		2.0	1.7	1.7	5.5
Total Current Assets		87.5	87.6	93.1	93.1
Fixed & Noncurrent Assets		12.5	12.4	6.9	6.9
Total Assets		100.0	100.0	100.0	100.0
Liabilities and Net Worth					
Trade Accounts Payable		14.8	10.8	8.4	17.5
Notes Payable		10.3	7.9	2.1	10.9
Other Current Liabilities		9.4	11.1	6.1	20.5
Total Current Liabilities		34.5	29.8	16.6	48.9
Long Term Liabilities		4.7	4.3	2.3	2.3
Net Worth or Owner Equity		60.8	65.9	81.1	48.8
Total Liabilities & Net Worth		100.0	100.0	100.0	100.0
Financial Ratios					
Current Ratio		2.5	3.1	5.9	1.9
Quick Ratio		1.3	2.3	4.1	1.1
Accounts Payable to Inventory (%)		70.9	37.5	19.9	76.4
Accounts Payable Payout Period (days)		19.3	15.7	17.6	45.1
Debt to Equity		0.6	0.5	0.2	1.1
EBIT to Total Assets (%)		16.5	11.3	20.5	13.9
Times Interest Earned		18.4	9.4	N/A	6.5
Asset Productivity					
Cash Sales (% of total sales)		3.0	3.5	5.5	5.0
Average Collection Period (days)		73.5	65.3	104.6	69.0
Bad Debt Losses (% of net sales)		0.0	0.1	0.1	0.3
Inventory Turnover		9.5	6.7	8.0	5.6
Inventory Holding Period (days)		39.5	54.7	51.8	66.0
Sales to Inventory Ratio		14.0	9.5	12.1	8.3
Gross Margin Return on Inventory (%)		399.9	295.1	405.4	270.5
Sales Path (% of sales)					
Warehouse Sales		90.0	90.0	94.0	96.3
Direct Shipments		10.0	10.0	6.0	3.7
Total Sales		100.0	100.0	100.0	100.0
Cash Flow Cycle					
Average Collection Period (days)		73.5	65.3	104.6	69.0
Plus Inventory Holding Period (days)		39.5	54.7	51.8	66.0
Gross Cash Flow (days)		113.0	120.0	156.4	135.0
Minus A/P Payout Period (days)		19.3	15.7	17.6	45.1
Cash Cycle (days)		93.7	104.3	138.8	89.9
Growth & Cash Sufficiency					
Growth Potential Index (%)		11.9	11.5	19.2	N/A
Cash to Current Liabilities (%)		17.0	19.1	36.0	0.0
Defensive Interval (days)		19.8	32.4	36.9	0.0
Sales to Working Capital		6.0	4.8	3.4	5.8

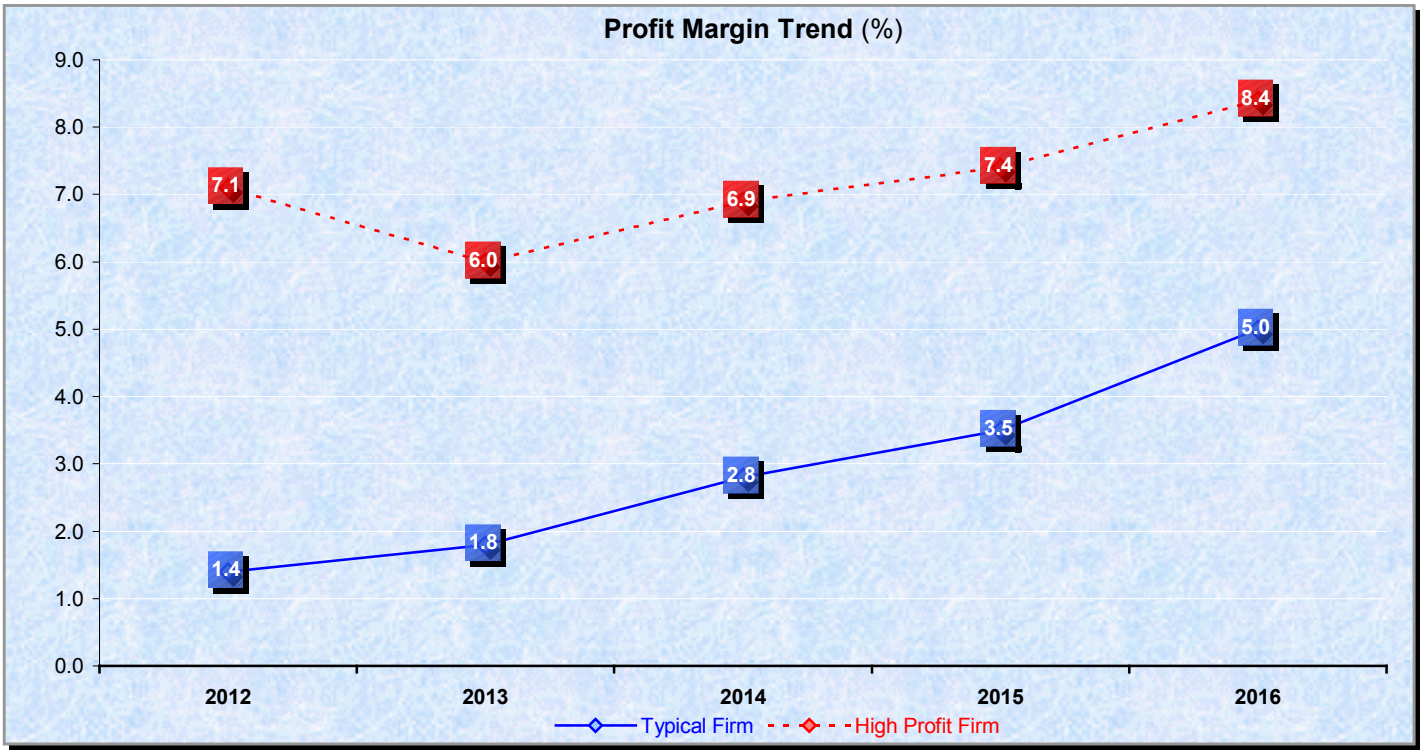
Regions

	North-eastern	South-eastern	North Central	Western	Canada
Number of Firms Reporting	2	11	20	4	4
Shipments Received (monthly avg.)		248	375	444	450
Sales $ per Shipment Received		3,371	3,440	2,699	4,106
Stockkeeping Units (SKUs)		500	1,820	6,921	3,050
Sales $ per SKU		23,838	6,255	15,673	15,412
Inventory $ per SKU		1,696	634	1,037	1,601
Customers		150	371	295	1,100
Sales $ per Customer		102,709	47,571	112,572	62,429
Orders Shipped (monthly avg.)		211	986	567	2,900
Sales $ per Order		5,715	2,225	2,305	2,962
Lines per Order (avg.)		10.0	7.5	4.5	8.0
Sales $ per Order Line		476	260	515	412
Product Sales (% of sales)					
Builders Hardware		36.0	44.5	59.3	56.8
Electronic Hardware		7.6	4.3	2.8	16.1
Metal Doors & Related Products		23.2	20.1	15.8	13.9
Wood Doors & Frames		20.6	15.7	17.8	3.4
Toilet Accessories & Partitions		5.0	4.9	1.3	5.3
Other		7.6	10.5	3.0	4.5
Total Sales		100.0	100.0	100.0	100.0
Type of Sale (% of sales)					
Contract Jobs		82.0	66.5	77.5	51.5
Non Contract Sales		18.0	33.5	22.5	48.5
Total Sales		100.0	100.0	100.0	100.0
Manufacturers		100	150	335	173
Sales $ per Manufacturer		102,864	124,777	65,505	353,599
Employees (FTE)		33.5	61.5	48.0	N/A
Sales $ per Employee		332,742	348,138	290,654	N/A
Gross Margin $ per Employee		104,500	105,308	103,007	N/A
Salary $ per Employee		68,000	60,933	60,874	N/A
Payroll $ per Employee		78,661	78,583	73,701	N/A
Payroll Expense (% of sales)		23.9	22.3	23.8	20.5
Benefits (% of total payroll)		12.6	17.6	16.7	9.2
Personnel Productivity Ratio		61.5	65.0	60.5	58.5
Direct Labor Employees					
Firms With Direct Labor Employees (% of firms)		72.7	80.0	75.0	75.0
Direct Labor FTEs (at firms with them)		13.0	15.0	N/A	N/A

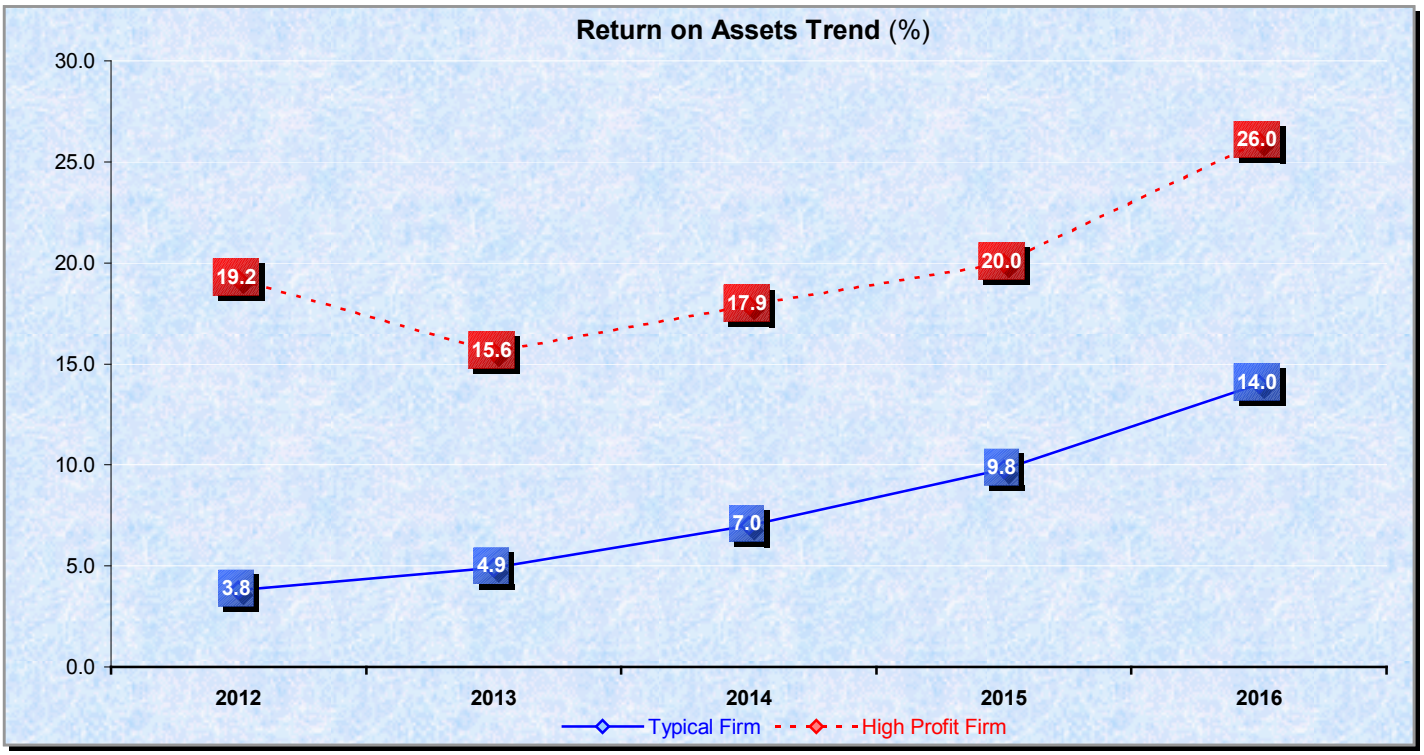
Trends

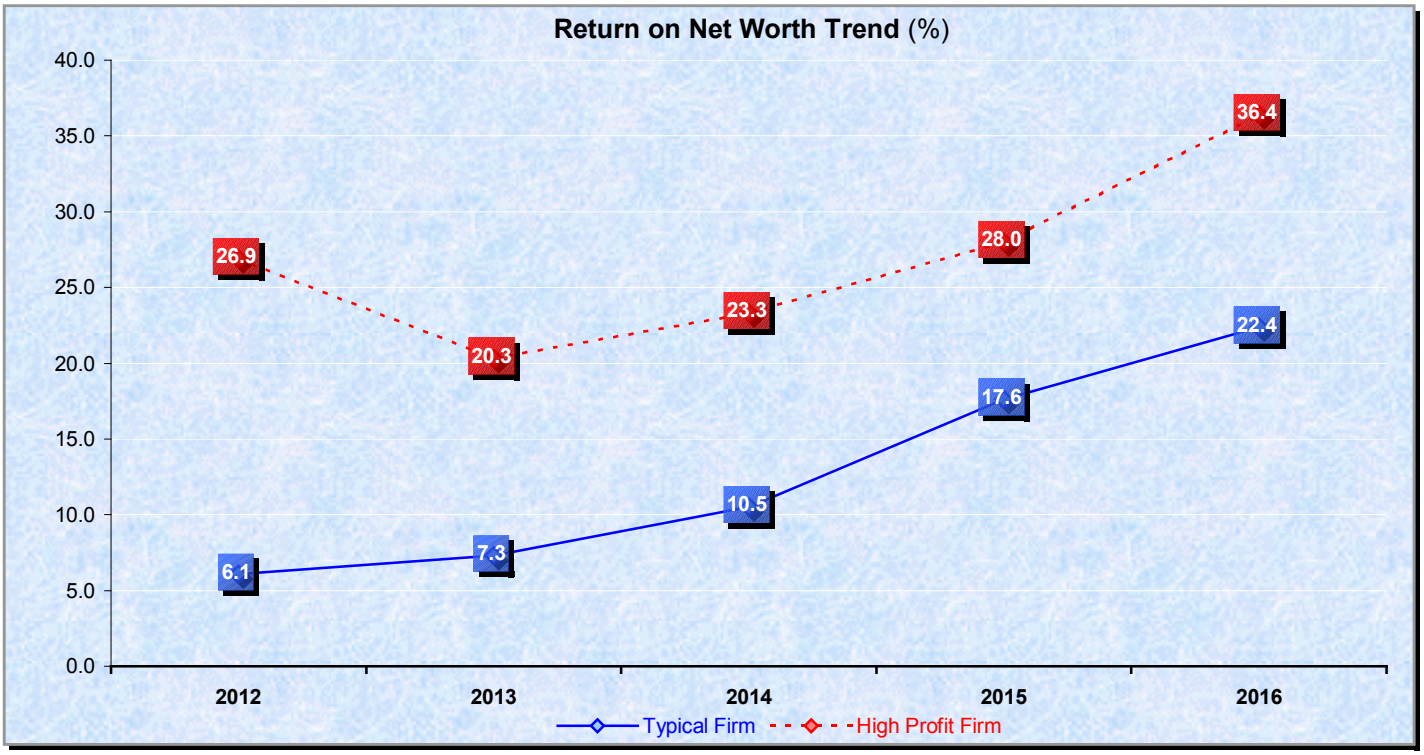
The following graphs present trends for key ratios complied from prior survey results.





Trends


Return on Assets Trend (%)
30.0
25.0
20.0
15.0
10.0
5.0
0.0
19.2
15.6
17.9
20.0
26.0
3.8
4.9
7.0
9.8
14.0
2012
2013
2014
2015
2016
Typical Firm
High Profit Firm


Return on Net Worth Trend (%)
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
26.9
20.3
23.3
28.0
36.4
6.1
7.3
10.5
17.6
22.4
2012
2013
2014
2015
2016
Typical Firm
High Profit Firm

Trends

These tables present five-year trends for selected ratios. Historical data were compiled from prior reports. Different members may have participated each year so the results do not represent a consistent sample.

	2012	2013	2014	2015	2016
Number of Firms Reporting	47	43	42	45	45
Typical $ Sales Volume	12,597,940	15,615,088	16,309,393	16,603,633	19,631,289
Sales Change (% from prior year)	-0.2	9.8	3.7	4.7	4.9
Strategic Profit Model Ratios					
Profit Margin (pre-tax %)	1.4	1.8	2.8	3.5	5.0
Asset Turnover	2.7	2.7	2.5	2.8	2.8
Return on Assets (pre-tax %)	3.8	4.9	7.0	9.8	14.0
Financial Leverage	1.6	1.5	1.5	1.8	1.6
Return on Net Worth (pre-tax %)	6.1	7.3	10.5	17.6	22.4
Income Statement (% of sales)					
Net Sales	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Cost of Goods Sold					
Materials	N/A	67.0	67.0	65.0	64.5
Direct Labor	N/A	2.4	1.9	2.8	2.6
Other Cost of Goods Sold	N/A	0.4	0.6	1.4	0.6
Cost of Goods Sold	**70.1**	**69.8**	**69.5**	**69.2**	**67.7**
Gross Margin	**29.9**	**30.2**	**30.5**	**30.8**	**32.3**
Personnel Expenses					
Executive Salaries & Bonuses	3.1	3.2	3.2	3.2	2.8
Sales Salaries & Commissions	6.8	7.6	6.6	8.1	7.3
Warehouse & Delivery Wages	1.9	1.9	1.5	1.4	1.8
All Other Employee Wages	5.1	3.7	5.6	4.6	5.1
Total Salaries, Wages & Bonuses	16.9	16.4	16.9	17.3	17.0
Payroll Taxes (FICA, workers' comp. & unemp.)	1.6	1.6	1.5	1.5	1.4
Group Insurance (medical, hospitalization, etc.)	1.4	1.4	1.4	1.2	1.6
Employee Benefits (profit sharing, pension, etc.)	0.4	0.5	0.6	0.5	0.6
Total Personnel Expenses	**20.3**	**19.9**	**20.4**	**20.5**	**20.6**
Occupancy Expenses					
Utilities (heat, light, power, water)	0.3	0.3	0.3	0.3	0.3
Telephone	0.3	0.3	0.2	0.2	0.2
Building Repairs & Maintenance	0.2	0.2	0.2	0.2	0.2
Rent or Real Estate Ownership	2.0	2.0	1.8	1.5	1.5
Total Occupancy Expenses	**2.8**	**2.8**	**2.5**	**2.2**	**2.2**
Other Operating Expenses					
Advertising & Promotion	0.1	0.1	0.0	0.1	0.1
Vehicle Expenses	1.1	1.0	1.0	0.9	0.7
Insurance (business liability & casualty)	0.3	0.4	0.4	0.4	0.4
Depreciation	0.6	0.6	0.4	0.4	0.5
Bad Debt Losses	0.0	0.1	0.1	0.1	0.1
All Other Operating Expenses	3.0	3.3	2.7	2.8	2.4
Total Other Operating Expenses	**5.1**	**5.5**	**4.6**	**4.7**	**4.2**
Total Operating Expenses	**28.2**	**28.2**	**27.5**	**27.4**	**27.0**
Operating Profit	**1.7**	**2.0**	**3.0**	**3.4**	**5.3**
Other Income	0.1	0.2	0.2	0.2	0.0
Interest Expense	0.4	0.4	0.4	0.1	0.3
Other Non-operating Expenses	0.0	0.0	0.0	0.0	0.0
Profit Before Taxes	**1.4**	**1.8**	**2.8**	**3.5**	**5.0**

Trends

	2012	2013	2014	2015	2016
Typical Total $ Assets	4,665,904	5,783,366	6,523,757	5,929,869	7,011,175
Assets (% of assets)					
Cash & Marketable Securities	7.2	8.0	9.3	8.3	4.1
Trade Accounts Receivable	53.4	50.4	47.1	50.5	55.6
Inventory	25.2	24.0	28.7	28.1	28.7
Other Current Assets	2.1	3.1	1.9	2.3	1.7
Total Current Assets	87.9	85.5	87.0	89.2	90.1
Fixed & Noncurrent Assets	12.1	14.5	13.0	10.8	9.9
Total Assets	100.0	100.0	100.0	100.0	100.0
Liabilities and Net Worth (% of sales)					
Trade Accounts Payable	21.9	16.9	19.6	21.9	13.3
Notes Payable	3.0	5.2	3.6	4.9	8.7
Other Current Liabilities	6.4	7.5	8.4	12.0	9.5
Total Current Liabilities	31.3	29.6	31.6	38.8	31.5
Long Term Liabilities	5.3	4.5	3.1	4.3	4.8
Net Worth or Owner Equity	63.4	65.9	65.3	56.9	63.7
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0	100.0
Financial Ratios					
Current Ratio	2.6	2.9	3.1	2.2	3.1
Quick Ratio	2.0	2.0	1.9	1.5	2.1
Accounts Payable to Inventory (%)	64.0	55.2	58.3	48.0	39.7
Accounts Payable Payout Period (days)	26.6	26.0	23.5	20.0	17.9
Debt to Equity	0.6	0.5	0.5	0.6	0.6
EBIT to Total Assets (%)	5.0	5.6	8.4	11.1	12.8
Times Interest Earned	7.4	8.2	12.8	13.8	15.0
Asset Productivity					
Cash Sales (% of total sales)	4.0	3.0	3.0	4.0	4.0
Average Collection Period (days)	63.2	65.2	68.9	69.8	66.5
Bad Debt Losses (% of net sales)	0.0	0.1	0.1	0.1	0.1
Inventory Turnover	7.1	7.7	6.8	6.5	6.7
Inventory Holding Period (days)	51.6	47.4	53.8	55.9	54.2
Sales to Inventory Ratio	11.0	11.3	10.1	9.6	9.6
Gross Margin Return on Inventory (%)	330.6	338.4	289.2	311.6	320.7
Cash Flow Cycle					
Average Collection Period (days)	63.2	65.2	68.9	69.8	66.5
Plus Inventory Holding Period (days)	51.6	47.4	53.8	55.9	54.2
Gross Cash Flow (days)	114.8	112.6	122.7	125.7	120.7
Minus A/P Payout Period (days)	26.6	26.0	23.5	20.0	17.9
Cash Cycle (days)	88.2	86.6	99.2	105.7	102.8
Growth & Cash Sufficiency					
Growth Potential Index (%)	7.4	6.7	9.3	16.1	15.5
Cash to Current Liabilities (%)	14.2	6.6	12.5	6.6	11.1
Defensive Interval (days)	28.1	18.0	23.5	14.1	14.1
Sales to Working Capital	5.5	4.9	4.9	5.6	4.9

Trends

	2012	2013	2014	2015	2016
Shipments Received (monthly avg.)	228	395	315	280	380
Sales $ per Shipment Received	2,558	2,452	2,834	2,833	3,153
Stockkeeping Units (SKUs)	1,200	1,273	1,532	1,320	1,269
Sales $ per SKU	6,328	7,691	8,419	9,800	9,910
Inventory $ per SKU	586	730	706	891	977
Customers	201	258	230	210	200
Sales $ per Customer	48,357	35,871	49,070	58,628	52,391
Orders Shipped (monthly avg.)	387	401	360	360	450
Sales $ per Order	2,081	2,210	2,340	2,401	2,314
Lines per Order (avg.)	9.0	8.0	7.0	8.0	8.0
Sales $ per Order Line	297	300	347	328	369
Product Sales (% of sales)					
Builders Hardware	41.9	45.3	44.8	44.5	45.1
Electronic Hardware	4.8	4.8	4.8	5.1	6.2
Metal Doors & Related Products	25.8	20.1	21.4	21.5	20.0
Wood Doors & Frames	15.5	17.6	16.2	16.6	16.3
Toilet Accessories & Partitions	3.8	3.4	3.3	3.7	4.4
Other	8.2	8.8	9.5	8.6	8.0
Total Sales	100.0	100.0	100.0	100.0	100.0
Type of Sale (% of sales)					
Contract Jobs	70.0	69.0	67.0	69.5	68.0
Non Contract Sales	30.0	31.0	33.0	30.5	32.0
Total Sales	100.0	100.0	100.0	100.0	100.0
Manufacturers	107	125	147	150	140
Sales $ per Manufacturer	98,905	102,064	102,591	112,351	112,754
FTE Employees	39	45.0	46.5	47.0	51.0
Sales $ per Employee	306,186	324,648	318,745	314,323	333,914
Gross Margin $ per Employee	97,617	96,319	97,775	103,474	106,343
Salary $ per Employee	51,198	59,600	56,028	57,282	67,753
Payroll $ per Employee	60,694	72,302	69,518	74,552	78,948
Payroll Expense (% of sales)	20.3	22.3	22.3	23.3	23.2
Benefits (% of total payroll)	16.5	15.1	16.0	15.6	14.3
Personnel Productivity Ratio	67.9	66.0	66.9	66.6	63.8
Direct Labor Employees					
Firms With Direct Labor Employees (% of firms)	N/A	73.7	70.6	78.0	78.0
Direct Labor FTEs (at firms with them)	N/A	9.5	12.0	11.5	13.0

Ratio Calculation

Ratio	Calculation	Comment
Accounts Payable Payout Period (days)	$\frac{\text{Accounts Payable}}{\text{Cost of Goods Sold} \div 365 \text{ days}}$	Measures the promptness of paying suppliers
Accounts Payable to Inventory	$\frac{\text{Accounts Payable} \times 100}{\text{Year-end Inventory}}$	Measures the percent of inventory financed by suppliers of that inventory
Average Collection Period (days)	$\frac{\text{Accounts Receivable}}{\text{Credit Sales} \div 365 \text{ days}}$	Measures the promptness of paying suppliers
Asset Turnover	$\frac{\text{Net Sales}}{\text{Total Assets}}$	Measures sales generated per dollar of assets
Cash Cycle (days)	Avg. Collection Period + Inventory Holding Period – Accounts Payable Payout Period	Days invested in a product from purchase until the sales invoice is collected
Cash to Current Liabilities	$\frac{\text{Cash} \times 100}{\text{Current Liabilities}}$	Measures ability to pay short-term debt with cash
Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Measures ability to pay short-term debt with current assets
Debt to Equity	$\frac{\text{Total Liabilities}}{\text{Net Worth}}$	Measures balance between debt and owner equity
Defensive Interval (days)	$\frac{\text{Cash}}{(\text{Operating Expenses} - \text{Depreciation}) \div 365 \text{ days}}$	Measures how long the firm can operate on existing cash balances
EBIT to Total Assets	$\frac{(\text{Profit Before Taxes} + \text{Interest}) \times 100}{\text{Total Assets}}$	Measures earnings from operations before interest and taxes as a percent of total assets
Financial Leverage	$\frac{\text{Total Assets}}{\text{Net Worth}}$	Measures assets financed per dollar of net worth
Gross Margin	$\frac{\text{Gross Profit Dollars}}{\text{Net Sales}}$	Measures profitability after the costs of making or buying the product are subtracted from sales
Gross Margin Return on Inventory	$\frac{\text{Warehouse Gross Profit} \times 100}{\text{Inventory}}$	Measures gross margin earned per dollar of inventory

Ratio Calculation

Ratio	Calculation	Comment
Inventory Holding Period (days)	$\frac{365 \text{ days}}{\text{Inventory Turnover}}$	Measures the number of days inventory is typically held in stock
Inventory Turnover	$\frac{\text{Warehouse Cost of Goods Sold}}{\text{Inventory}}$	Measures the number of times the entire inventory stock is sold per year
Growth Potential Index	$\frac{\text{Profit After Taxes x 100}}{\text{AR + Inventory – AP}}$	Measures how fast the firm can grow using internally generated funds
Personnel Productivity Ratio	$\frac{\text{Payroll Expense x 100}}{\text{Gross Profit}}$	Measures payroll expense as a percent of gross margin earned
Profit Margin	$\frac{\text{Profit Before Taxes x 100}}{\text{Net Sales}}$	Measures profit earned as a percentage of net sales
Quick Ratio	$\frac{\text{Cash + Accounts Receivable}}{\text{Current Liabilities}}$	Measures the ability to pay short-term debt with assets that can be converted to cash most quickly
Return on Assets	$\frac{\text{Profit Before Taxes}}{\text{Total Assets}}$	Measures profit earned as a percent of assets
Return on Net Worth	$\frac{\text{Profit Before Taxes}}{\text{Net Worth}}$	Measures profit earned as a percent of net worth
Sales per Employee	$\frac{\text{Net Sales}}{\text{Number of FTE Employees}}$	Measures sales generated per full-time employee
Sales to Fixed Assets	$\frac{\text{Net Sales}}{\text{Net Fixed Assets}}$	Measures the productivity of each dollar invested in fixed assets
Sales to Inventory	$\frac{\text{Warehouse Sales}}{\text{Year-end Inventory}}$	Measures dollar sales generated per dollar of inventory
Sales to Working Capital	$\frac{\text{Net Sales}}{\text{Current Assets – Current Liabilities}}$	Measures ability to generate sales without tying up working capital
Times Interest Earned	$\frac{\text{Profit Before Taxes + Interest}}{\text{Interest}}$	Measures number of times earnings will cover interest payments