



# 2016 PROFIT Report

**An analysis of  
fiscal 2015**





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# Introduction

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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 2015. The results show a typical firm generated sales of \$16,603,633 and a pre-tax profit of 3.5%. Sales for the typical high-profit firm were \$11,796,309, with a profit of 7.4%. Of greatest consequence, the typical firm had a 9.8% 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 20.0%.

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 <u>Distributor</u>	High Profit DHI
<b>Sales per Employee</b> Measures employee productivity	\$314,323	\$373,490
<b>Gross Margin Percentage</b> Reflects the ability to manage COGS effectively	30.8%	31.9%
<b>Operating Expense Percentage</b> Focuses on expense control	27.4%	24.4%
<b>Inventory Turnover</b> (times) Reflects how well inventory is managed	6.5	7.2
<b>Average Collection Period</b> (days) Reflects accounts receivable collection practices	69.8	65.9

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 <u>Distributor</u>	High Profit DHI
<b>Income Statement</b>		
<b>Net Sales</b>	\$16,603,633	\$11,796,309
Cost of Goods Sold	<u>11,489,714</u>	<u>8,033,286</u>
<b>Gross Margin</b>	5,113,919	3,763,023
Operating Expenses	<u>4,549,396</u>	<u>2,878,300</u>
<b>Operating Profit</b>	564,523	884,723
Other Income/Expenses	<u>16,604</u>	<u>-11,796</u>
<b>Profit Before Taxes</b>	\$581,127	\$872,927
<b>Profit Before Taxes (%)</b>	3.5%	7.4%
<b>Assets</b>		
Cash	\$492,179	\$144,177
Accounts Receivable	2,994,584	2,499,070
Inventory	1,666,293	1,218,952
All Other Assets	<u>776,813</u>	<u>506,804</u>
<b>Total Assets</b>	\$5,929,869	\$4,369,003
<b>Return on Assets</b> (Pre-Tax)	9.8%	20.0%

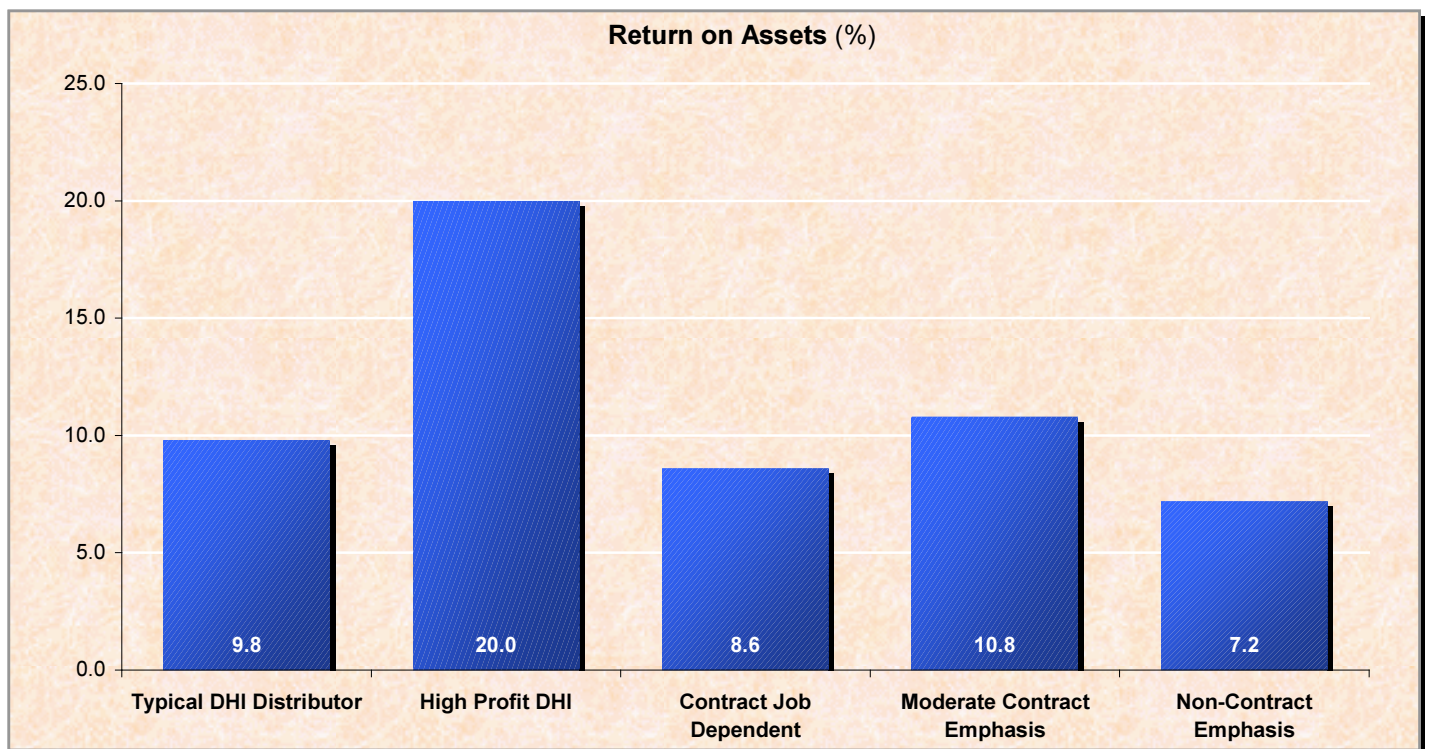
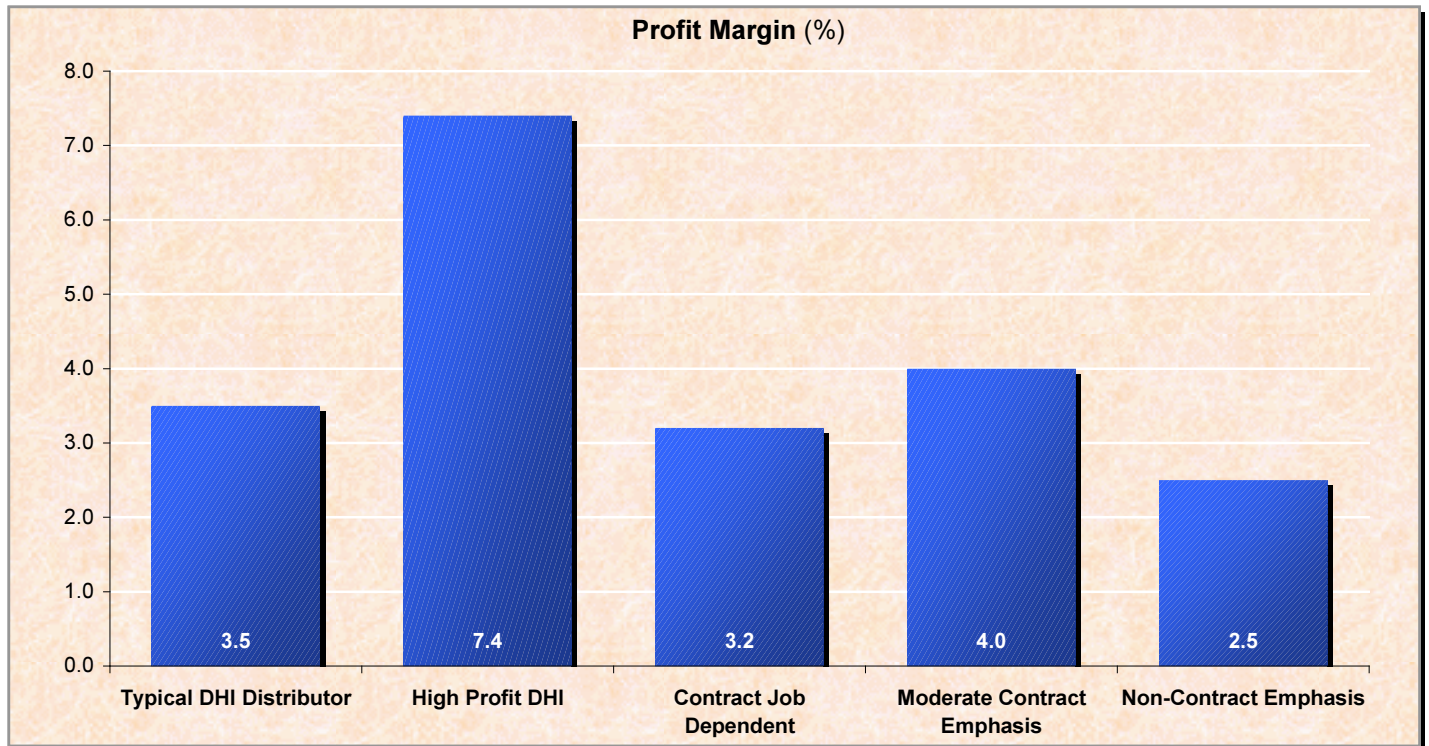
# Executive Summary

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	Typical DHI <u>Distributor</u>	High Profit DHI
<b>Typical Sales Volume</b>	\$16,603,633	\$11,796,309
<b>Strategic Profit Model Ratios</b>		
Profit Margin (pre-tax)	3.5%	7.4%
Asset Turnover	2.8	2.7
Return on Assets (pre-tax)	9.8%	20.0%
Financial Leverage	1.8	1.4
Return on Net Worth (pre-tax)	17.6%	28.0%
<b>Income Statement</b>		
<b>Net Sales</b>	<b>100.0%</b>	<b>100.0%</b>
Cost of Goods Sold	<u>69.2</u>	<u>68.1</u>
<b>Gross Margin</b>	<b>30.8</b>	<b>31.9</b>
<b>Operating Expenses</b>		
Payroll Expenses	20.5	18.5
Occupancy Expenses	2.2	2.5
Other Operating Expenses	<u>4.7</u>	<u>3.4</u>
<b>Total Operating Expenses</b>	<b>27.4</b>	<b>24.4</b>
<b>Operating Profit</b>	<b>3.4</b>	<b>7.5</b>
Other Income/Expenses	<u>0.1</u>	<u>-0.1</u>
<b>Profit Before Taxes</b>	<b>3.5%</b>	<b>7.4%</b>
<b>Financial Ratios</b>		
Current Ratio	2.2	3.4
Quick Ratio	1.5	2.4
Accounts Payable to Inventory	48.0%	32.6%
Accounts Payable Payout Period (days)	20.0	19.9
Debt to Equity	0.6	0.3
EBIT to Total Assets	11.1%	20.1%
Times Interest Earned	13.8	21.3
<b>Asset Productivity</b>		
Average Collection Period (days)	69.8	65.9
Inventory Turnover (times)	6.5	7.2
Inventory Holding Period (days)	55.9	50.7
Gross Margin Return on Inventory	311.6%	367.7%
<b>Growth &amp; Cash Sufficiency</b>		
Growth Potential Index (GPI)	16.1%	23.6%
Cash Cycle (days)	105.7	96.7
<b>Operations</b>		
Sales per SKU	\$9,800	\$10,048
Sales per Customer	\$58,628	\$52,822
Sales per Order	\$2,401	\$2,736
<b>Employees</b>		
Sales per Employee	\$314,323	\$373,490
Gross Margin per Employee	\$103,474	\$118,922
Payroll per Employee	\$74,552	\$77,418
Personnel Productivity Ratio	66.6%	58.0%

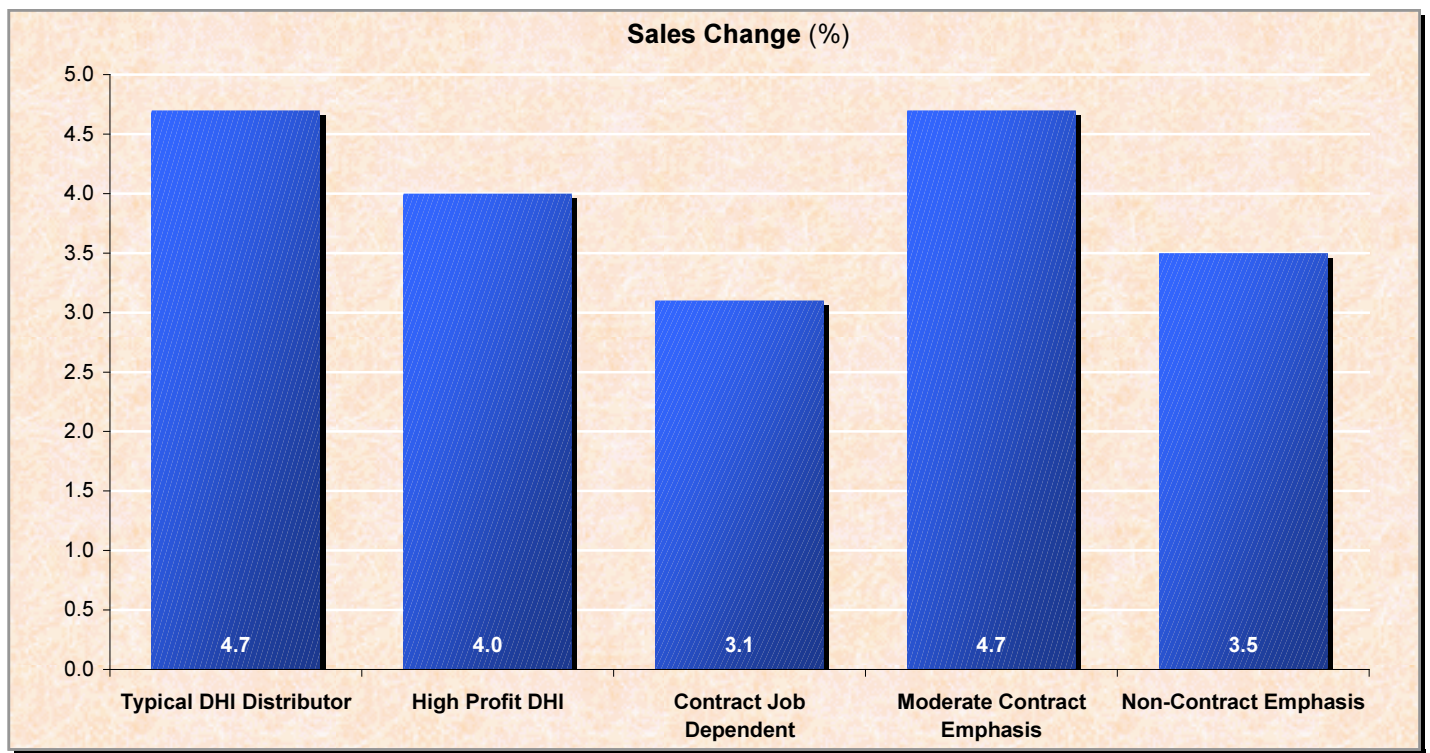
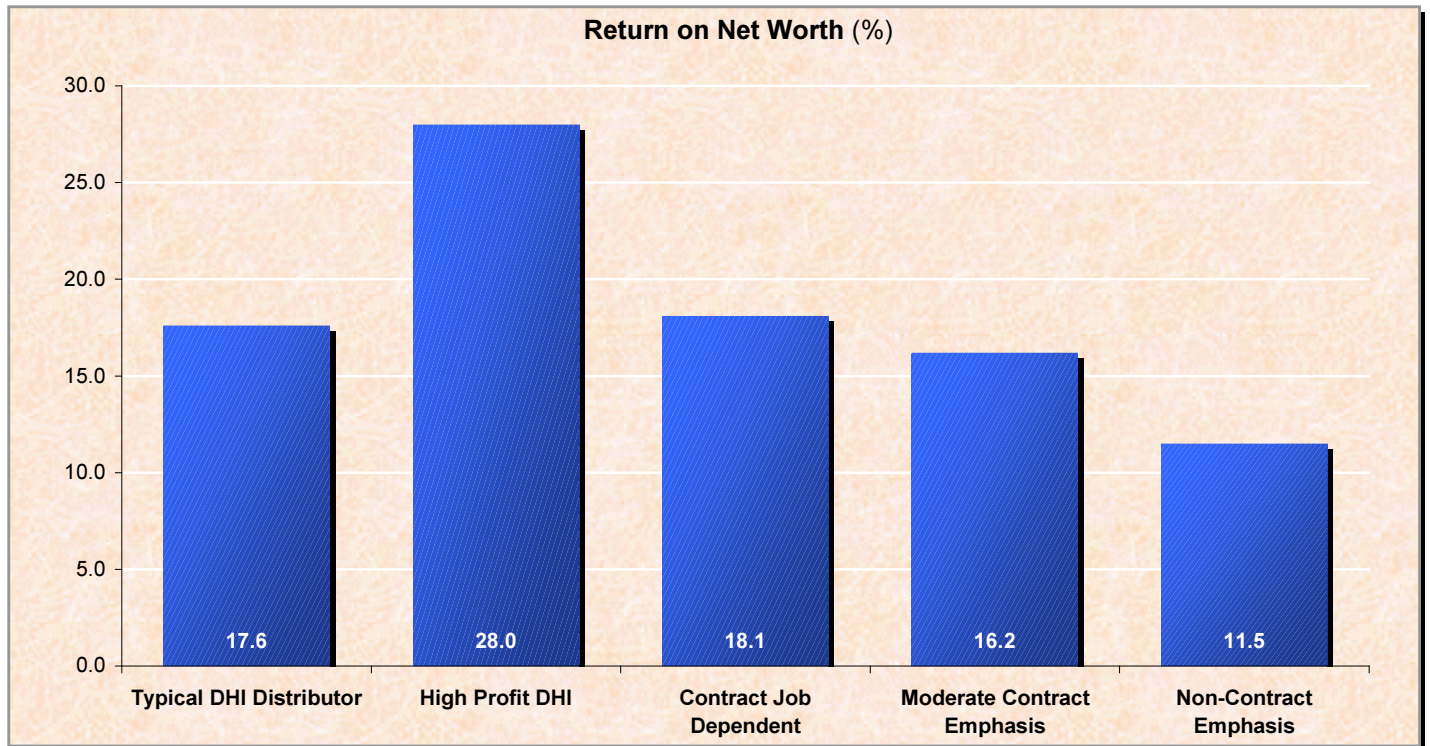
# Graphical Analysis

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

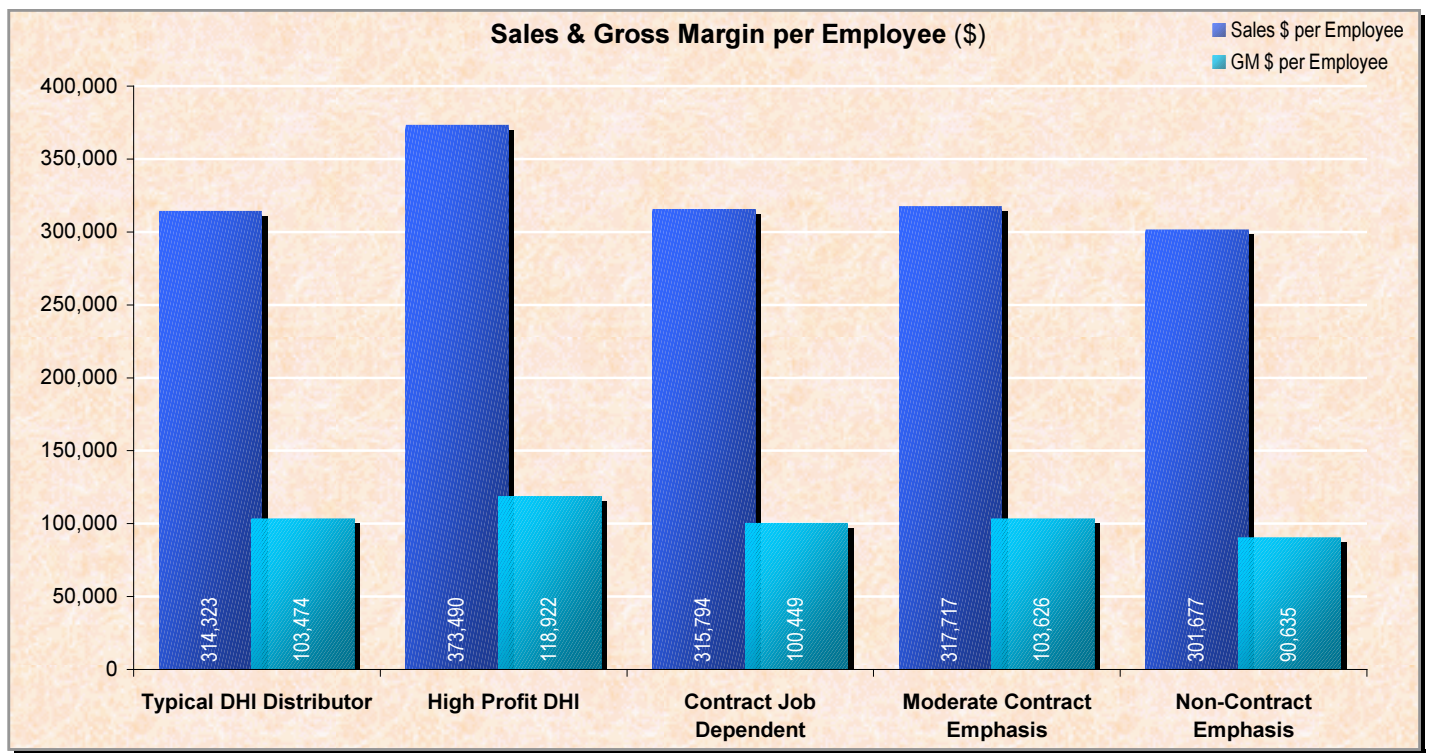
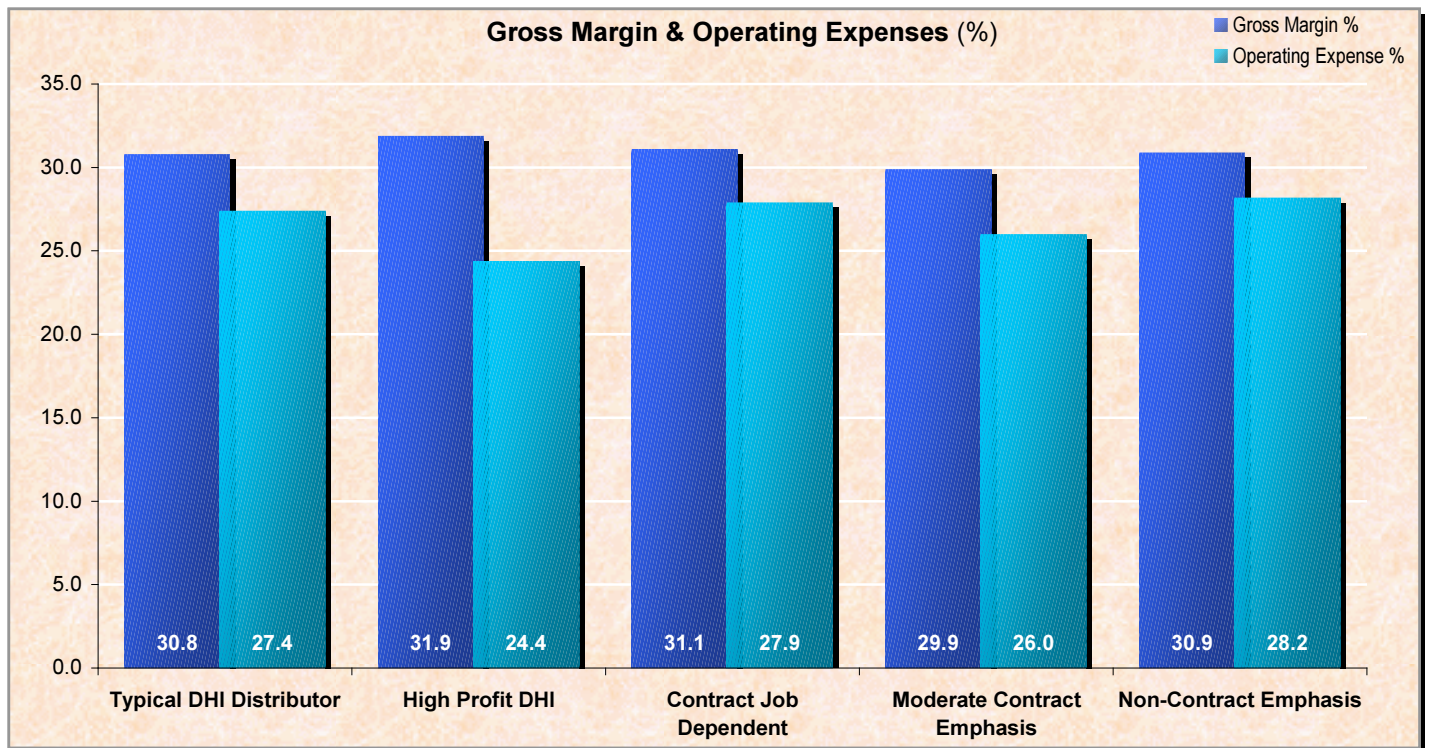




# Graphical Analysis

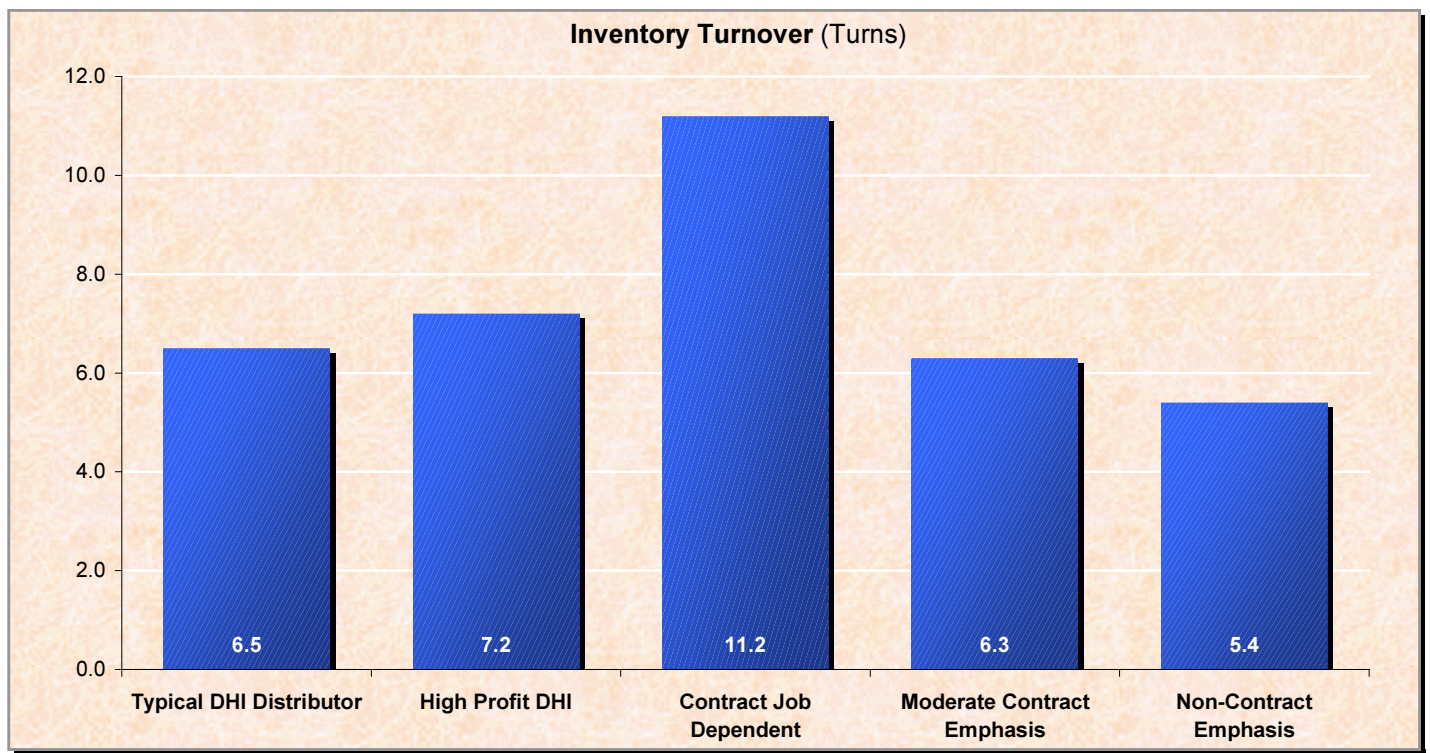
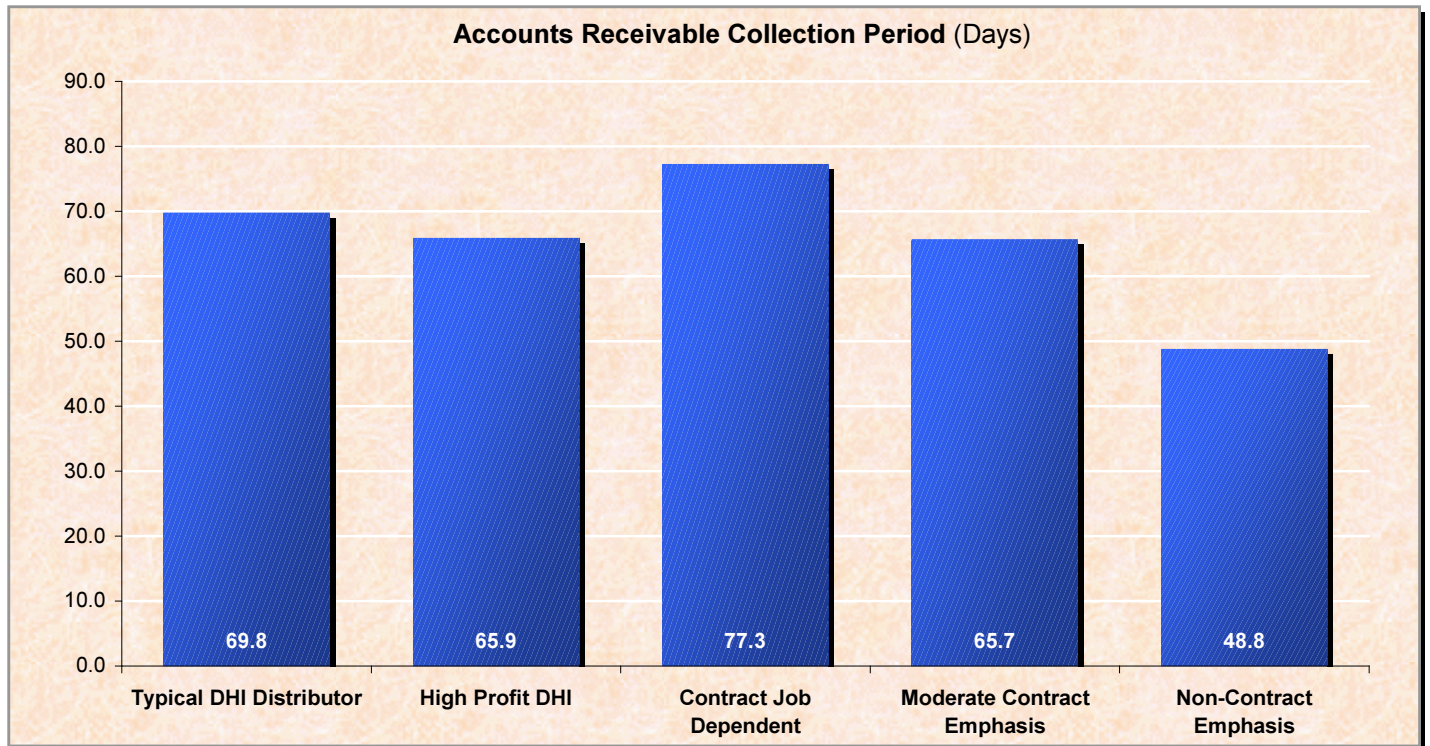


# Graphical Analysis





# Graphical Analysis



# Return on Investment

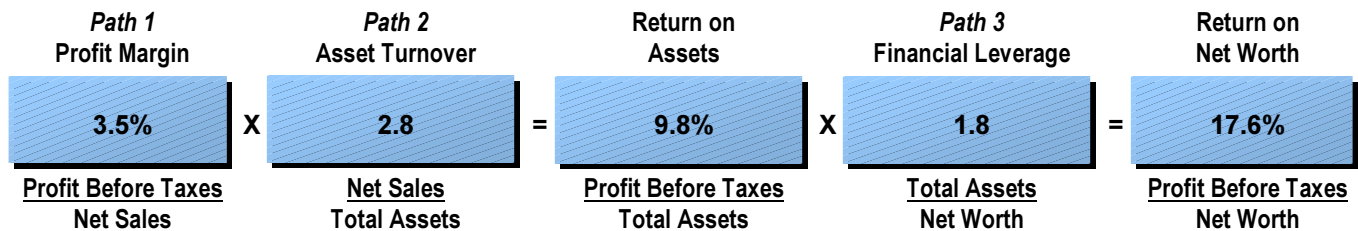
Return on investment is the most meaningful way to evaluate overall business profitability. It is important to understand how return on investment is calculated and how it can be improved.

## 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 3.5% means that for every \$1.00 of sales the business was able to produce 3.5¢ 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 1.8 times suggests that for every \$1.00 in net worth, the firm had \$1.80 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
<b>Strategic Profit Model Ratios</b>					
Profit Margin (pre-tax %)	3.5	7.4	3.2	4.0	2.5
Asset Turnover	2.8	2.7	2.7	2.7	2.9
Return on Assets (pre-tax %)	9.8	20.0	8.6	10.8	7.2
Financial Leverage	1.8	1.4	2.1	1.5	1.6
Return on Net Worth (pre-tax %)	17.6	28.0	18.1	16.2	11.5

# 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.

	<u>Typical DHI Distributor</u>	<u>High Profit DHI</u>	<u>Contract Job Dependent</u>	<u>Moderate Contract Emphasis</u>	<u>Non- Contract Emphasis</u>
<b>Number of Firms Reporting</b>	45	11	12	25	5
<b>Typical Sales \$ Volume</b>	16,603,633	11,796,309	16,209,240	14,989,614	23,938,572
Sales Change (2014 to 2015 %)	4.7	4.0	3.1	4.7	3.5
<b>Income Statement</b> (% of sales)					
<b>Net Sales</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Cost of Goods Sold</b>					
Materials	65.0	65.1	63.4	66.6	64.4
Direct Labor	2.8	2.6	3.5	2.8	1.7
Other Cost of Goods Sold	<u>1.4</u>	<u>0.4</u>	<u>2.0</u>	<u>0.7</u>	<u>3.0</u>
<b>Total Cost of Goods Sold</b>	<b>69.2</b>	<b>68.1</b>	<b>68.9</b>	<b>70.1</b>	<b>69.1</b>
<b>Gross Margin</b>	<b>30.8</b>	<b>31.9</b>	<b>31.1</b>	<b>29.9</b>	<b>30.9</b>
<b>Personnel Expenses</b>					
Executive Salaries & Bonuses	3.2	3.0	3.5	2.8	3.3
Sales Salaries & Commissions	8.1	5.6	7.5	8.0	7.0
Warehouse & Delivery Wages	1.4	1.6	1.1	1.4	2.4
All Other Employee Wages	<u>4.6</u>	<u>4.7</u>	<u>6.2</u>	<u>4.0</u>	<u>3.9</u>
Total Salaries, Wages & Bonuses	17.3	14.9	18.3	16.2	16.6
Payroll Taxes (FICA, workers' comp. & unemp.)	1.5	1.4	1.5	1.5	1.2
Group Insurance (medical, hospitalization, etc.)	1.2	1.5	0.9	1.2	2.4
Employee Benefits (profit sharing, pension, etc.)	<u>0.5</u>	<u>0.7</u>	<u>0.4</u>	<u>0.5</u>	<u>0.7</u>
<b>Total Personnel Expenses</b>	<b>20.5</b>	<b>18.5</b>	<b>21.1</b>	<b>19.4</b>	<b>20.9</b>
<b>Occupancy Expenses</b>					
Utilities (heat, light, power, water)	0.3	0.3	0.2	0.3	0.3
Telephone	0.2	0.2	0.3	0.2	0.3
Building Repairs & Maintenance	0.2	0.2	0.2	0.2	0.5
Rent or Real Estate Ownership	<u>1.5</u>	<u>1.8</u>	<u>1.5</u>	<u>1.5</u>	<u>2.0</u>
<b>Total Occupancy Expenses</b>	<b>2.2</b>	<b>2.5</b>	<b>2.2</b>	<b>2.2</b>	<b>3.1</b>
<b>Other Operating Expenses</b>					
Advertising & Promotion	0.1	0.0	0.1	0.1	0.2
Vehicle Expense	0.9	0.6	0.7	0.8	1.1
Insurance (business liability & casualty)	0.4	0.4	0.4	0.4	0.7
Depreciation	0.4	0.5	0.6	0.3	0.5
Bad Debt Losses	0.1	0.0	0.0	0.1	-0.1
All Other Operating Expenses	<u>2.8</u>	<u>1.9</u>	<u>2.8</u>	<u>2.7</u>	<u>1.8</u>
<b>Total Other Operating Expenses</b>	<b>4.7</b>	<b>3.4</b>	<b>4.6</b>	<b>4.4</b>	<b>4.2</b>
<b>Total Operating Expenses</b>	<b>27.4</b>	<b>24.4</b>	<b>27.9</b>	<b>26.0</b>	<b>28.2</b>
<b>Operating Profit</b>	<b>3.4</b>	<b>7.5</b>	<b>3.2</b>	<b>3.9</b>	<b>2.7</b>
Other Income	0.2	0.1	0.3	0.2	0.1
Interest Expense	0.1	0.2	0.3	0.1	0.2
Other Non-operating Expenses	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>
<b>Profit Before Taxes</b>	<b>3.5</b>	<b>7.4</b>	<b>3.2</b>	<b>4.0</b>	<b>2.5</b>

# 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.

	<u>Typical DHI Distributor</u>	<u>High Profit DHI</u>	<u>Contract Job Dependent</u>	<u>Moderate Contract Emphasis</u>	<u>Non- Contract Emphasis</u>
<b>Expenses In Relation To GM</b> (% of gross profit)					
<b>Gross Margin</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Personnel Expenses</b>					
Executive Salaries & Bonuses	10.4	9.4	11.3	9.4	10.7
Sales Salaries & Commissions	26.3	17.6	24.1	26.7	22.6
Warehouse & Delivery Wages	4.6	5.0	3.5	4.7	7.8
All Other Employee Wages	<u>14.9</u>	<u>14.7</u>	<u>19.9</u>	<u>13.4</u>	<u>12.6</u>
Total Salaries, Wages & Bonuses	56.2	46.7	58.8	54.2	53.7
Payroll Taxes (FICA, workers' comp. & unemp.)	4.9	4.4	4.8	5.0	3.9
Group Insurance (medical, hospitalization, etc.)	3.9	4.7	2.9	4.0	7.8
Employee Benefits (profit sharing, pension, etc.)	<u>1.6</u>	<u>2.2</u>	<u>1.3</u>	<u>1.7</u>	<u>2.3</u>
<b>Total Personnel Expenses</b>	<b>66.6</b>	<b>58.0</b>	<b>67.8</b>	<b>64.9</b>	<b>67.7</b>
<b>Occupancy Expenses</b>					
Utilities (heat, light, power, water)	1.0	0.9	0.6	1.0	1.0
Telephone	0.6	0.6	1.1	0.7	1.0
Building Repairs & Maintenance	0.6	0.6	0.6	0.7	1.6
Rent or Real Estate Ownership	<u>4.9</u>	<u>5.6</u>	<u>4.8</u>	<u>5.0</u>	<u>6.4</u>
<b>Total Occupancy Expenses</b>	<b>7.1</b>	<b>7.7</b>	<b>7.1</b>	<b>7.4</b>	<b>10.0</b>
<b>Other Operating Expenses</b>					
Advertising & Promotion	0.3	0.0	0.3	0.3	0.6
Vehicle Expense	2.9	1.9	2.3	2.7	3.6
Insurance (business liability & casualty)	1.3	1.3	1.3	1.4	2.3
Depreciation	1.3	1.6	1.9	1.0	1.6
Bad Debt Losses	0.3	0.0	0.0	0.3	-0.3
All Other Operating Expenses	<u>9.1</u>	<u>6.0</u>	<u>9.0</u>	<u>9.0</u>	<u>5.8</u>
<b>Total Other Operating Expenses</b>	<b>15.2</b>	<b>10.8</b>	<b>14.8</b>	<b>14.7</b>	<b>13.6</b>
<b>Total Operating Expenses</b>	<b>88.9</b>	<b>76.5</b>	<b>89.7</b>	<b>87.0</b>	<b>91.3</b>
<b>Operating Profit</b>	<b>11.1</b>	<b>23.5</b>	<b>10.3</b>	<b>13.0</b>	<b>8.7</b>
Other Income	0.6	0.3	1.1	0.7	0.3
Interest Expense	0.3	0.6	1.1	0.3	0.6
Other Non-operating Expenses	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.3</u>
<b>Profit Before Taxes</b>	<b>11.4</b>	<b>23.2</b>	<b>10.3</b>	<b>13.4</b>	<b>8.1</b>

# 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.

	<u>Typical DHI Distributor</u>	<u>High Profit DHI</u>	<u>Contract Job Dependent</u>	<u>Moderate Contract Emphasis</u>	<u>Non- Contract Emphasis</u>
<b>Typical Total \$ Assets</b>	5,929,869	4,369,003	6,003,422	5,551,709	8,254,680
<b>Assets</b> (% of assets)					
Cash & Marketable Securities	8.3	3.3	11.2	4.2	12.8
Trade Accounts Receivable	50.5	57.2	54.1	52.9	43.5
Inventory	28.1	27.9	14.8	30.2	31.7
Other Current Assets	<u>2.3</u>	<u>0.9</u>	<u>6.0</u>	<u>2.2</u>	<u>0.9</u>
Total Current Assets	89.2	89.3	86.1	89.5	88.9
Fixed & Noncurrent Assets	<u>10.8</u>	<u>10.7</u>	<u>13.9</u>	<u>10.5</u>	<u>11.1</u>
Total Assets	100.0	100.0	100.0	100.0	100.0
<b>Liabilities and Net Worth</b> (% of assets)					
Trade Accounts Payable	21.9	13.7	34.0	13.6	12.8
Notes Payable	4.9	5.2	2.9	7.6	1.6
Other Current Liabilities	<u>12.0</u>	<u>8.1</u>	<u>6.4</u>	<u>10.0</u>	<u>18.8</u>
Total Current Liabilities	38.8	27.0	43.3	31.2	33.2
Long Term Liabilities	4.3	0.4	9.5	3.6	2.7
Net Worth or Owner Equity	<u>56.9</u>	<u>72.6</u>	<u>47.2</u>	<u>65.2</u>	<u>64.1</u>
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0	100.0

# Financial Ratios

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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 <u>Distributor</u>	High Profit DHI	Contract Job <u>Dependent</u>	Moderate Contract <u>Emphasis</u>	Non- Contract <u>Emphasis</u>
<b>Financial Ratios</b>					
Current Ratio	2.2	3.4	2.1	3.1	2.5
Quick Ratio	1.5	2.4	1.4	1.7	1.8
Accounts Payable to Inventory (%)	48.0	32.6	130.4	32.6	27.4
Accounts Payable Payout Period (days)	20.0	19.9	44.7	16.7	16.7
Debt to Equity	0.6	0.3	1.2	0.5	0.4
EBIT to Total Assets (%)	11.1	20.1	8.6	12.4	10.3
Times Interest Earned	13.8	21.3	8.0	14.9	11.8



# 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 6.5 means that the firm sells out the equivalent of its inventory value 6.5 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.

	<u>Typical DHI Distributor</u>	<u>High Profit DHI</u>	<u>Contract Job Dependent</u>	<u>Moderate Contract Emphasis</u>	<u>Non- Contract Emphasis</u>
<b>Collections</b>					
Cash Sales (% of net sales)	4.0	4.0	1.0	4.0	5.0
Average Collection Period (days)	69.8	65.9	77.3	65.7	48.8
Bad Debt Losses (% of net sales)	0.1	0.0	0.0	0.1	-0.1
<b>Inventory</b>					
Inventory Turnover	6.5	7.2	11.2	6.3	5.4
Inventory Holding Period (days)	55.9	50.7	32.8	58.1	67.7
Sales to Inventory Ratio	9.6	10.8	16.8	8.7	8.3
Gross Margin Return on Inventory (%)	311.6	367.7	579.1	272.8	288.7
<b>Sales Path (% of sales)</b>					
Warehouse Sales	90.0	85.0	83.5	90.0	95.0
Direct Shipments	<u>10.0</u>	<u>15.0</u>	<u>16.5</u>	<u>10.0</u>	<u>5.0</u>
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 5.6, for example, means the firm can generate \$5.60 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.

	<u>Typical DHI Distributor</u>	<u>High Profit DHI</u>	<u>Contract Job Dependent</u>	<u>Moderate Contract Emphasis</u>	<u>Non- Contract Emphasis</u>
<b>Cash Flow Cycle</b>					
Average Collection Period (days)	69.8	65.9	77.3	65.7	48.8
Plus Inventory Holding Period (days)	<u>55.9</u>	<u>50.7</u>	<u>32.8</u>	<u>58.1</u>	<u>67.7</u>
Gross Cash Flow (days)	125.7	116.6	110.1	123.8	116.5
Minus A/P Payout Period (days)	<u>20.0</u>	<u>19.9</u>	<u>44.7</u>	<u>16.7</u>	<u>16.7</u>
Cash Cycle (days)	105.7	96.7	65.4	107.1	99.8
<b>Growth &amp; Cash Sufficiency</b>					
Growth Potential Index (%)	16.1	23.6	8.8	16.1	15.1
Cash to Current Liabilities (%)	6.6	6.0	14.9	4.6	11.3
Defensive Interval (days)	14.1	10.1	59.4	9.8	42.5
Sales to Working Capital	5.6	5.2	6.6	5.6	5.5

# 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
<b>Shipments Received</b> (monthly avg.)	280	250	178	360	N/A
Sales \$ per Shipment Received	2,833	3,450	4,244	2,511	N/A
<b>Stockkeeping Units</b> (SKUs)	1,320	1,625	850	1,410	2,199
Sales \$ per SKU	9,800	10,048	21,917	8,613	7,235
Inventory \$ per SKU	891	847	1,171	888	890
<b>Customers</b>	210	205	110	299	365
Sales \$ per Customer	58,628	52,822	140,439	49,472	24,968
<b>Orders Shipped</b> (monthly avg.)	360	280	250	471	2,975
Sales \$ per Order	2,401	2,736	5,383	2,159	1,218
Lines per Order (avg.)	8.0	5.0	14.0	6.5	8.0
Sales \$ per Order Line	328	499	585	365	172
<b>Product Sales</b> (% of sales)					
Builders Hardware	44.5	43.8	39.5	48.1	36.2
Electronic Hardware	5.1	5.5	6.2	4.6	5.8
Metal Doors & Related Products	21.5	24.4	21.6	21.5	22.0
Wood Doors & Frames	16.6	17.6	18.9	16.8	10.2
Toilet Accessories & Partitions	3.7	3.9	4.8	2.8	5.2
Other	8.6	4.8	9.0	6.2	20.6
Total Sales	100.0	100.0	100.0	100.0	100.0
<b>Type of Sale</b> (% of sales)					
Contract Jobs	69.5	67.5	86.0	65.0	43.0
Non-Contract Sales	30.5	32.5	14.0	35.0	57.0
Total Sales	100.0	100.0	100.0	100.0	100.0
<b>Manufacturers</b>	150	123	155	125	165
Sales \$ per Manufacturer	112,351	127,771	102,898	105,734	158,943

# Employees

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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 <u>Distributor</u>	High Profit DHI	Contract Job <u>Dependent</u>	Moderate Contract <u>Emphasis</u>	Non- Contract <u>Emphasis</u>
<b>FTE Employees</b>	47.0	32.0	45.5	42.0	71.0
Sales \$ per Employee	314,323	373,490	315,794	317,717	301,677
Gross Margin \$ per Employee	103,474	118,922	100,449	103,626	90,635
Salary \$ per Employee	57,282	66,264	60,079	58,791	56,871
Payroll \$ per Employee	74,552	77,418	75,253	72,073	63,748
Payroll Expense (% of sales)	23.3	21.1	24.6	22.2	22.6
Benefits (% of total payroll)	15.6	16.1	14.7	15.2	17.7
Personnel Productivity Ratio (%)	66.6	58.0	67.8	64.9	67.7
<b>Direct Labor Employees</b>					
Firms With Direct Labor Employees (% of firms)	78.0	72.7	60.0	88.0	60.0
Direct Labor FTEs (at firms with them)	11.5	7.0	8.0	11.5	N/A

# Sales Volume

	<b>Sales Under \$10 Million</b>	<b>Sales \$10 - \$20 Million</b>	<b>Sales Over \$20 Million</b>
<b>Number of Firms Reporting</b>	16	12	16
<b>Typical Sales \$ Volume</b>	6,161,063	16,603,633	32,272,180
Sales Change (2014 to 2015 %)	4.0	6.3	5.1
<b>Strategic Profit Model Ratios</b>			
Profit Margin (pre-tax %)	4.0	4.7	2.6
Asset Turnover	2.7	2.7	2.9
Return on Assets (pre-tax %)	10.8	12.7	7.5
Financial Leverage	1.8	1.5	2.3
Return on Net Worth (pre-tax %)	19.4	19.0	17.2
<b>Income Statement</b> (% of sales)			
<b>Net Sales</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Cost of Goods Sold</b>			
Materials	64.3	64.5	66.2
Direct Labor	2.7	2.7	2.9
Other Cost of Goods Sold	<u>1.7</u>	<u>0.7</u>	<u>1.2</u>
<b>Total Cost of Goods Sold</b>	<b>68.7</b>	<b>67.9</b>	<b>70.3</b>
<b>Gross Margin</b>	<b>31.3</b>	<b>32.1</b>	<b>29.7</b>
<b>Personnel Expenses</b>			
Executive Salaries & Bonuses	5.3	3.5	2.0
Sales Salaries & Commissions	7.1	7.8	8.1
Warehouse & Delivery Wages	2.3	1.5	1.1
All Other Employee Wages	<u>2.1</u>	<u>4.9</u>	<u>6.5</u>
Total Salaries, Wages & Bonuses	16.8	17.7	17.7
Payroll Taxes (FICA, workers' comp. & unemp.)	1.5	1.3	1.3
Group Insurance (medical, hospitalization, etc.)	1.4	1.5	0.9
Employee Benefits (profit sharing, pension, etc.)	<u>0.3</u>	<u>0.6</u>	<u>0.7</u>
<b>Total Personnel Expenses</b>	<b>20.0</b>	<b>21.1</b>	<b>20.6</b>
<b>Occupancy Expenses</b>			
Utilities (heat, light, power, water)	0.3	0.3	0.3
Telephone	0.3	0.2	0.2
Building Repairs & Maintenance	0.2	0.2	0.2
Rent or Real Estate Ownership	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>
<b>Total Occupancy Expenses</b>	<b>2.3</b>	<b>2.2</b>	<b>2.2</b>
<b>Other Operating Expenses</b>			
Advertising & Promotion	0.1	0.0	0.1
Vehicle Expenses	0.8	0.9	0.7
Insurance (business liability & casualty)	0.7	0.4	0.2
Depreciation	0.4	0.4	0.4
Bad Debt Losses	0.1	0.0	0.1
All Other Operating Expenses	<u>2.8</u>	<u>2.9</u>	<u>2.7</u>
<b>Total Other Operating Expenses</b>	<b>4.9</b>	<b>4.6</b>	<b>4.2</b>
<b>Total Operating Expenses</b>	<b>27.2</b>	<b>27.9</b>	<b>27.0</b>
<b>Operating Profit</b>	<b>4.1</b>	<b>4.2</b>	<b>2.7</b>
Other Income	0.0	0.5	0.2
Interest Expense	0.1	0.0	0.3
Other Non-operating Expenses	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Profit Before Taxes</b>	<b>4.0</b>	<b>4.7</b>	<b>2.6</b>

# Sales Volume

	Sales Under \$10 <u>Million</u>	Sales \$10 - \$20 <u>Million</u>	Sales Over \$20 <u>Million</u>
<b>Expenses in Relationship to GM</b> (% of gross profit)			
<b>Gross Margin</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Personnel Expenses</b>			
Executive Salaries & Bonuses	16.9	10.9	6.7
Sales Salaries & Commissions	22.7	24.3	27.3
Warehouse & Delivery Wages	7.4	4.7	3.7
All Other Employee Wages	<u>6.7</u>	<u>15.2</u>	<u>21.9</u>
Total Salaries, Wages & Bonuses	53.7	55.1	59.6
Payroll Taxes (FICA, workers' comp. & unemp.)	4.8	4.0	4.4
Group Insurance (medical, hospitalization, etc.)	4.4	4.7	3.0
Employee Benefits (profit sharing, pension, etc.)	<u>1.0</u>	<u>1.9</u>	<u>2.4</u>
<b>Total Personnel Expenses</b>	<b>63.9</b>	<b>65.7</b>	<b>69.4</b>
<b>Occupancy Expenses</b>			
Utilities (heat, light, power, water)	1.0	0.9	1.0
Telephone	1.0	0.6	0.7
Building Repairs & Maintenance	0.6	0.6	0.7
Rent or Real Estate Ownership	<u>4.8</u>	<u>4.7</u>	<u>5.0</u>
<b>Total Occupancy Expenses</b>	<b>7.4</b>	<b>6.8</b>	<b>7.4</b>
<b>Other Operating Expenses</b>			
Advertising & Promotion	0.3	0.0	0.3
Vehicle Expense	2.6	2.8	2.4
Insurance (business liability & casualty)	2.2	1.3	0.7
Depreciation	1.3	1.3	1.3
Bad Debt Losses	0.3	0.0	0.3
All Other Operating Expenses	<u>8.9</u>	<u>9.0</u>	<u>9.1</u>
<b>Total Other Operating Expenses</b>	<b>15.6</b>	<b>14.4</b>	<b>14.1</b>
<b>Total Operating Expenses</b>	<b>86.9</b>	<b>86.9</b>	<b>90.9</b>
<b>Operating Profit</b>	<b>13.1</b>	<b>13.1</b>	<b>9.1</b>
Other Income	0.0	1.5	0.7
Interest Expense	0.3	0.0	1.0
Other Non-operating Expenses	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Profit Before Taxes</b>	<b>12.8</b>	<b>14.6</b>	<b>8.8</b>

# Sales Volume

	Sales Under \$10 <u>Million</u>	Sales \$10 - \$20 <u>Million</u>	Sales Over \$20 <u>Million</u>
<b>Typical Total \$ Assets</b>	2,281,875	6,149,494	11,128,338
<b>Balance Sheet</b> (% of assets)			
<b>Assets</b>			
Cash & Marketable Securities	8.2	21.1	2.2
Trade Accounts Receivable	49.4	42.6	54.6
Inventory	30.9	19.8	28.5
Other Current Assets	<u>2.0</u>	<u>3.4</u>	<u>2.5</u>
Total Current Assets	90.5	86.9	87.8
Fixed & Noncurrent Assets	<u>9.5</u>	<u>13.1</u>	<u>12.2</u>
Total Assets	100.0	100.0	100.0
<b>Liabilities and Net Worth</b>			
Trade Accounts Payable	19.6	12.2	28.6
Notes Payable	10.5	5.7	2.5
Other Current Liabilities	<u>9.5</u>	<u>13.6</u>	<u>21.2</u>
Total Current Liabilities	39.6	31.5	52.3
Long Term Liabilities	4.9	0.0	5.0
Net Worth or Owner Equity	<u>55.5</u>	<u>68.5</u>	<u>42.7</u>
Total Liabilities & Net Worth	100.0	100.0	100.0
<b>Financial Ratios</b>			
Current Ratio	2.2	3.3	1.7
Quick Ratio	1.5	2.1	1.4
Accounts Payable to Inventory (%)	35.2	35.2	70.3
Accounts Payable Payout Period (days)	18.3	15.1	32.6
Debt to Equity	0.6	0.5	1.3
EBIT to Total Assets (%)	13.0	15.2	8.2
Times Interest Earned	21.1	10.2	8.0
<b>Asset Productivity</b>			
Cash Sales (% of total sales)	8.0	4.0	1.5
Average Collection Period (days)	69.8	63.1	74.7
Bad Debt Losses (% of net sales)	0.1	0.0	0.1
Inventory Turnover	5.4	7.9	6.8
Inventory Holding Period (days)	67.8	46.3	53.9
Sales to Inventory Ratio	8.7	11.8	10.1
Gross Margin Return on Inventory (%)	290.6	370.2	336.9
<b>Sales Path</b> (% of sales)			
Warehouse Sales	90.0	90.0	88.5
Direct Shipments	<u>10.0</u>	<u>10.0</u>	<u>11.5</u>
Total Sales	100.0	100.0	100.0
<b>Cash Flow Cycle</b>			
Average Collection Period (days)	69.8	63.1	74.7
Plus Inventory Holding Period (days)	<u>67.8</u>	<u>46.3</u>	<u>53.9</u>
Gross Cash Flow (days)	137.6	109.4	128.6
Minus A/P Payout Period (days)	<u>18.3</u>	<u>15.1</u>	<u>32.6</u>
Cash Cycle (days)	119.3	94.3	96.0
<b>Growth &amp; Cash Sufficiency</b>			
Growth Potential Index (%)	17.7	3.5	10.8
Cash to Current Liabilities (%)	8.6	60.7	2.9
Defensive Interval (days)	20.7	96.0	5.0
Sales to Working Capital	6.8	5.1	7.5

# Sales Volume

	<b>Sales Under \$10 Million</b>	<b>Sales \$10 - \$20 Million</b>	<b>Sales Over \$20 Million</b>
<b>Shipments Received</b> (monthly avg.)	223	400	600
Sales \$ per Shipment Received	2,660	2,799	3,205
<b>Stockkeeping Units</b> (SKUs)	1,005	1,326	2,500
Sales \$ per SKU	6,780	11,805	10,342
Inventory \$ per SKU	555	904	943
<b>Customers</b>	136	299	550
Sales \$ per Customer	43,006	56,173	78,346
<b>Orders Shipped</b> (monthly avg.)	280	575	1,200
Sales \$ per Order	2,494	2,313	2,308
<b>Lines per Order</b> (avg.)	6.0	9.5	8.0
Sales \$ per Order Line	492	313	302
<b>Product Sales</b> (% of sales)			
Builders Hardware	46.9	46.8	41.0
Electronic Hardware	4.7	5.9	4.7
Metal Doors & Related Products	20.7	23.9	20.4
Wood Doors & Frames	18.4	15.9	15.3
Toilet Accessories & Partitions	3.9	3.1	3.8
Other	<u>5.4</u>	<u>4.4</u>	<u>14.8</u>
Total Sales	100.0	100.0	100.0
<b>Type of Sale</b> (% of sales)			
Contract Jobs	68.9	69.0	71.0
Non-Contract Sales	<u>31.1</u>	<u>31.0</u>	<u>29.0</u>
Total Sales	100.0	100.0	100.0
<b>Manufacturers</b>	73	160	200
Sales \$ per Manufacturer	97,229	105,574	207,769
<b>FTE Employees</b>	21.0	47.5	101.0
Sales \$ per Employee	268,440	368,821	315,794
Gross Margin \$ per Employee	86,116	105,715	101,498
Salary \$ per Employee	55,422	65,912	57,976
Payroll \$ per Employee	64,426	78,217	74,928
Payroll Expense (% of sales)	22.7	23.8	23.5
Benefits (% of total payroll)	15.9	16.3	13.7
Personnel Productivity Ratio	63.9	65.7	69.4
<b>Direct Labor Employees</b>			
Firms With Direct Labor Employees (% of firms)	84.6	75.0	75.0
Direct Labor FTEs (at firms with them)	5.0	15.0	21.0



# 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.

<b>Northeastern</b>	Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania (Harrisburg and east), Rhode Island, Vermont
<b>Southeastern</b>	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
<b>North Central</b>	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
<b>Western</b>	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

	<u>North-eastern</u>	<u>South-eastern</u>	<u>North Central</u>	<u>Western</u>	<u>Canada</u>
<b>Number of Firms Reporting</b>	3	11	21	4	5
<b>Typical Sales \$ Volume</b>		11,796,309	19,541,671	13,456,649	24,108,807
Sales Change (2014 to 2015 %)		2.7	6.1	2.3	3.8
<b>Income Statement</b> (% of sales)					
<b>Net Sales</b>		100.0	100.0	100.0	100.0
<b>Cost of Goods Sold</b>					
Materials		65.6	66.9	59.6	63.3
Direct Labor		2.7	2.8	3.1	1.8
Other Cost of Goods Sold		<u>2.3</u>	<u>0.7</u>	<u>6.2</u>	<u>0.3</u>
<b>Total Cost of Goods Sold</b>		<b>70.6</b>	<b>70.4</b>	<b>68.9</b>	<b>65.4</b>
<b>Gross Margin</b>		<b>29.4</b>	<b>29.6</b>	<b>31.1</b>	<b>34.6</b>
<b>Personnel Expenses</b>					
Executive Salaries & Bonuses		3.7	3.0	N/A	2.1
Sales Salaries & Commissions		7.7	4.8	N/A	9.8
Warehouse & Delivery Wages		1.4	1.5	N/A	1.1
All Other Employee Wages		<u>3.5</u>	<u>5.8</u>	<u>N/A</u>	<u>7.9</u>
Total Salaries, Wages & Bonuses		16.3	15.1	17.0	20.9
Payroll Taxes (FICA, workers' comp. & unemp.)		1.3	1.4	2.1	1.5
Group Insurance (medical, hospitalization, etc.)		1.6	1.4	1.4	0.5
Employee Benefits (profit sharing, pension, etc.)		<u>0.2</u>	<u>0.8</u>	<u>0.8</u>	<u>0.7</u>
<b>Total Personnel Expenses</b>		<b>19.4</b>	<b>18.7</b>	<b>21.3</b>	<b>23.6</b>
<b>Occupancy Expenses</b>					
Utilities (heat, light, power, water)		0.3	0.3	0.2	0.3
Telephone		0.2	0.2	0.2	0.3
Building Repairs & Maintenance		0.2	0.2	0.2	0.4
Rent or Real Estate Ownership		<u>1.6</u>	<u>1.5</u>	<u>0.8</u>	<u>0.9</u>
<b>Total Occupancy Expenses</b>		<b>2.3</b>	<b>2.2</b>	<b>1.4</b>	<b>1.9</b>
<b>Other Operating Expenses</b>					
Advertising & Promotion		0.1	0.1	0.1	0.3
Vehicle Expenses		0.7	0.8	0.9	1.6
Insurance (business liability & casualty)		0.5	0.4	0.6	0.2
Depreciation		0.6	0.3	0.4	0.3
Bad Debt Losses		0.0	0.1	0.0	0.1
All Other Operating Expenses		<u>2.5</u>	<u>2.9</u>	<u>1.8</u>	<u>3.2</u>
<b>Total Other Operating Expenses</b>		<b>4.4</b>	<b>4.6</b>	<b>3.8</b>	<b>5.7</b>
<b>Total Operating Expenses</b>		<b>26.1</b>	<b>25.5</b>	<b>26.5</b>	<b>31.2</b>
<b>Operating Profit</b>		<b>3.3</b>	<b>4.1</b>	<b>4.6</b>	<b>3.4</b>
Other Income		0.5	0.2	0.4	0.0
Interest Expense		0.1	0.3	0.1	0.7
Other Non-operating Expenses		<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.5</u>
<b>Profit Before Taxes</b>		<b>3.7</b>	<b>4.0</b>	<b>4.9</b>	<b>2.2</b>

# Regions

	<u>North-eastern</u>	<u>South-eastern</u>	<u>North Central</u>	<u>Western</u>	<u>Canada</u>
<b>Number of Firms Reporting</b>	3	11	21	4	5
<b>Expenses in Relation to GM</b> (% of gross profit)					
<b>Gross Margin</b>		100.0	100.0	100.0	100.0
<b>Personnel Expenses</b>					
Executive Salaries & Bonuses		12.6	10.1	N/A	6.1
Sales Salaries & Commissions		26.2	16.2	N/A	28.3
Warehouse & Delivery Wages		4.8	5.1	N/A	3.2
All Other Employee Wages		11.9	19.6	N/A	22.8
Total Salaries, Wages & Bonuses		55.5	51.0	54.6	60.4
Payroll Taxes (FICA, workers' comp. & unemp.)		4.4	4.7	6.7	4.3
Group Insurance (medical, hospitalization, etc.)		5.4	4.7	4.5	1.4
Employee Benefits (profit sharing, pension, etc.)		0.7	2.7	2.7	2.0
<b>Total Personnel Expenses</b>		66.0	63.1	68.5	68.1
<b>Occupancy Expenses</b>					
Utilities (heat, light, power, water)		1.0	1.0	0.6	0.9
Telephone		0.7	0.7	0.6	0.9
Building Repairs & Maintenance		0.7	0.7	0.6	1.2
Rent or Real Estate Ownership		5.4	5.1	2.7	2.6
<b>Total Occupancy Expenses</b>		7.8	7.5	4.5	5.6
<b>Other Operating Expenses</b>					
Advertising & Promotion		0.3	0.3	0.3	0.9
Vehicle Expense		2.4	2.7	2.9	4.6
Insurance (business liability & casualty)		1.7	1.4	1.9	0.6
Depreciation		2.1	1.0	1.3	0.9
Bad Debt Losses		0.0	0.3	0.0	0.3
All Other Operating Expenses		8.5	9.8	5.8	9.2
<b>Total Other Operating Expenses</b>		15.0	15.5	12.2	16.5
<b>Total Operating Expenses</b>		88.8	86.1	85.2	90.2
<b>Operating Profit</b>		11.2	13.9	14.8	9.8
Other Income		1.7	0.7	1.3	0.0
Interest Expense		0.3	1.0	0.3	2.0
Other Non-operating Expenses		0.0	0.0	0.0	1.4
<b>Profit Before Taxes</b>		12.6	13.6	15.8	6.4
<b>Strategic Profit Model Ratios</b>					
Profit Margin (pre-tax %)		3.7	4.0	4.9	2.2
Asset Turnover		2.7	2.8	2.8	2.0
Return on Assets (pre-tax %)		10.0	11.2	13.7	4.4
Financial Leverage		1.8	1.6	1.2	2.5
Return on Net Worth (pre-tax %)		18.0	17.9	16.4	11.0

# Regions

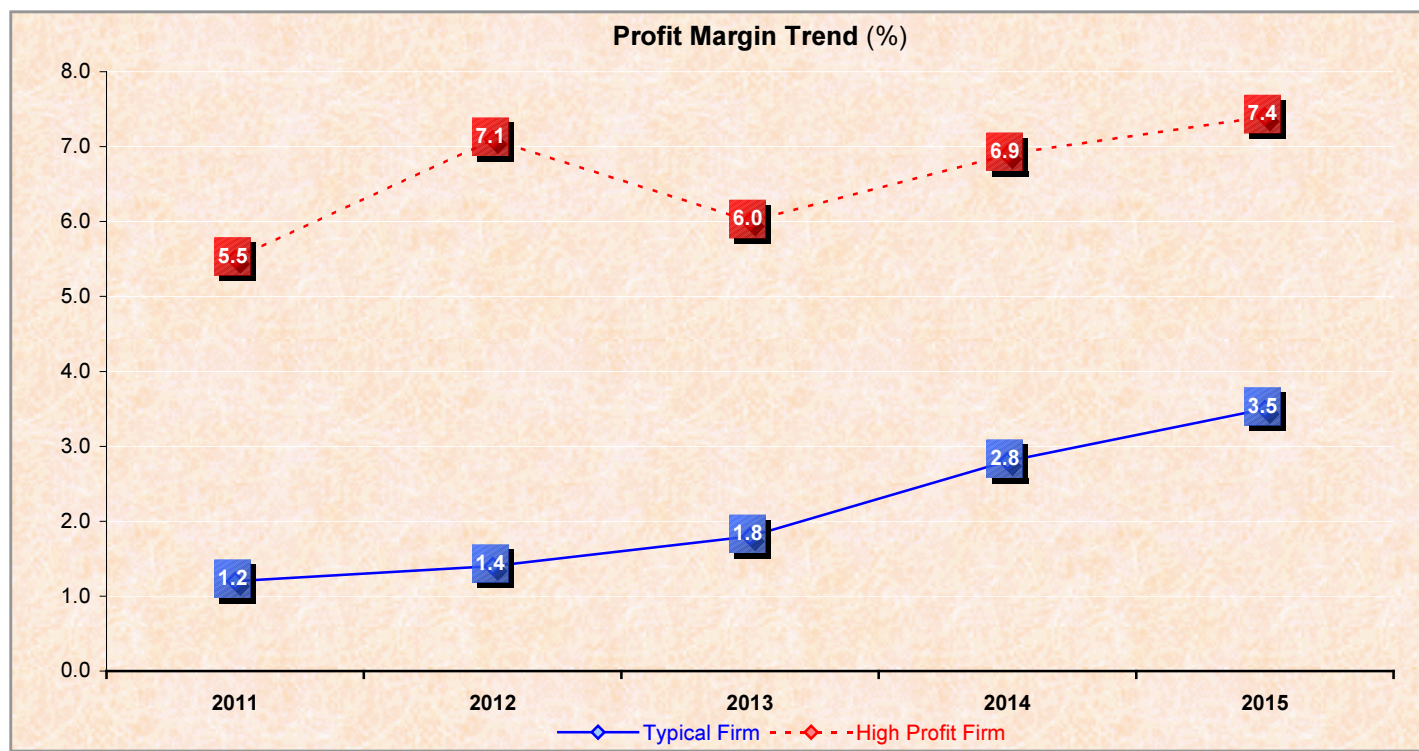
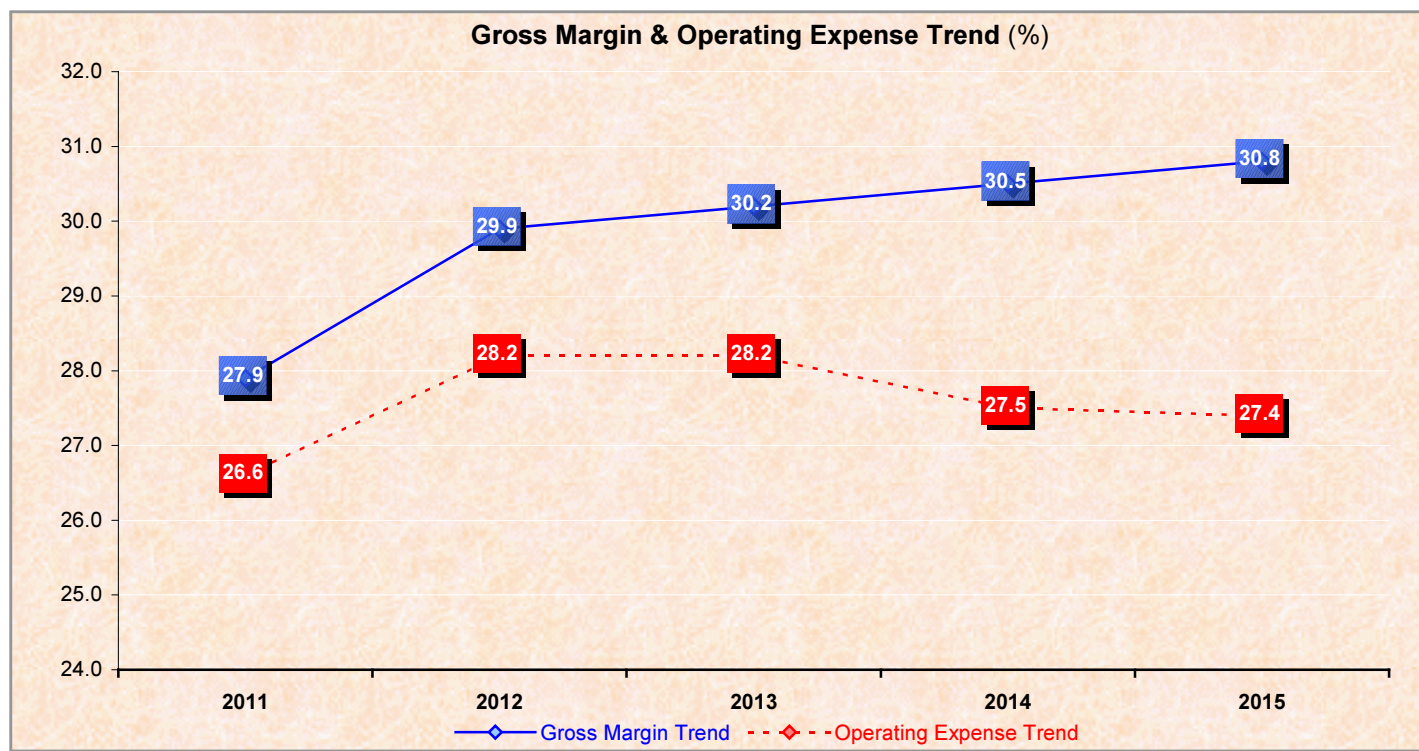
	<u>North-eastern</u>	<u>South-eastern</u>	<u>North Central</u>	<u>Western</u>	<u>Canada</u>
<b>Number of Firms Reporting</b>	3	11	21	4	5
<b>Typical Total \$ Assets</b>		4,369,003	6,979,168	4,805,946	12,054,404
<b>Balance Sheet</b> (% of assets)					
<b>Assets</b>					
Cash & Marketable Securities		12.2	5.4	17.2	2.1
Trade Accounts Receivable		49.0	53.7	46.3	51.2
Inventory		22.7	27.6	26.2	33.5
Other Current Assets		<u>4.3</u>	<u>2.0</u>	<u>2.3</u>	<u>4.8</u>
Total Current Assets		88.2	88.7	92.0	91.6
Fixed & Noncurrent Assets		<u>11.8</u>	<u>11.3</u>	<u>8.0</u>	<u>8.4</u>
Total Assets		100.0	100.0	100.0	100.0
<b>Liabilities and Net Worth</b>					
Trade Accounts Payable		21.7	11.3	4.6	24.7
Notes Payable		4.3	9.3	1.9	7.2
Other Current Liabilities		<u>12.9</u>	<u>9.8</u>	<u>7.1</u>	<u>28.7</u>
Total Current Liabilities		38.9	30.4	13.6	60.6
Long Term Liabilities		4.9	5.5	2.9	0.0
Net Worth or Owner Equity		<u>56.2</u>	<u>64.1</u>	<u>83.5</u>	<u>39.4</u>
Total Liabilities & Net Worth		100.0	100.0	100.0	100.0
<b>Financial Ratios</b>					
Current Ratio		2.1	2.5	5.3	1.5
Quick Ratio		1.7	1.5	3.4	0.9
Accounts Payable to Inventory (%)		65.4	32.6	22.2	112.4
Accounts Payable Payout Period (days)		21.5	16.7	11.9	49.4
Debt to Equity		0.8	0.5	0.2	1.5
EBIT to Total Assets (%)		11.0	12.4	15.0	6.1
Times Interest Earned		24.7	13.1	97.1	2.5
<b>Asset Productivity</b>					
Cash Sales (% of total sales)		8.0	3.0	3.5	5.0
Average Collection Period (days)		72.4	65.9	67.5	86.3
Bad Debt Losses (% of net sales)		0.0	0.1	0.0	0.1
Inventory Turnover		9.6	6.3	7.6	4.7
Inventory Holding Period (days)		38.0	58.1	48.1	77.8
Sales to Inventory Ratio		13.2	8.7	10.9	7.8
Gross Margin Return on Inventory (%)		378.3	288.7	333.9	270.7
<b>Sales Path</b> (% of sales)					
Warehouse Sales		90.0	90.0	92.5	100.0
Direct Shipments		<u>10.0</u>	<u>10.0</u>	<u>7.5</u>	<u>0.0</u>
Total Sales		100.0	100.0	100.0	100.0
<b>Cash Flow Cycle</b>					
Average Collection Period (days)		72.4	65.9	67.5	86.3
Plus Inventory Holding Period (days)		<u>38.0</u>	<u>58.1</u>	<u>48.1</u>	<u>77.8</u>
Gross Cash Flow (days)		110.4	124.0	115.6	164.1
Minus A/P Payout Period (days)		<u>21.5</u>	<u>16.7</u>	<u>11.9</u>	<u>49.4</u>
Cash Cycle (days)		88.9	107.3	103.7	114.7
<b>Growth &amp; Cash Sufficiency</b>					
Growth Potential Index (%)		N/A	17.7	N/A	6.1
Cash to Current Liabilities (%)		26.8	7.2	80.6	4.2
Defensive Interval (days)		56.5	9.4	75.4	8.5
Sales to Working Capital		5.6	5.5	4.1	8.0

# Regions

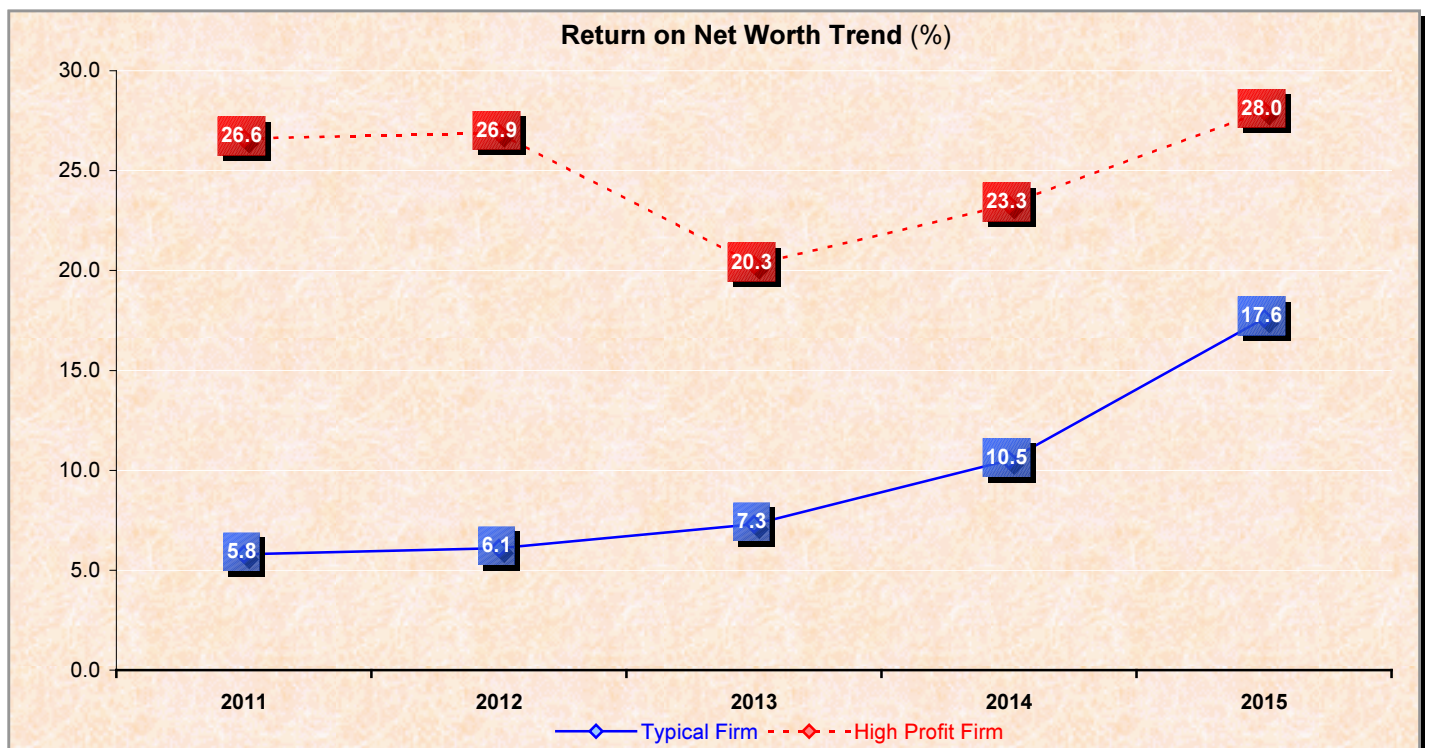
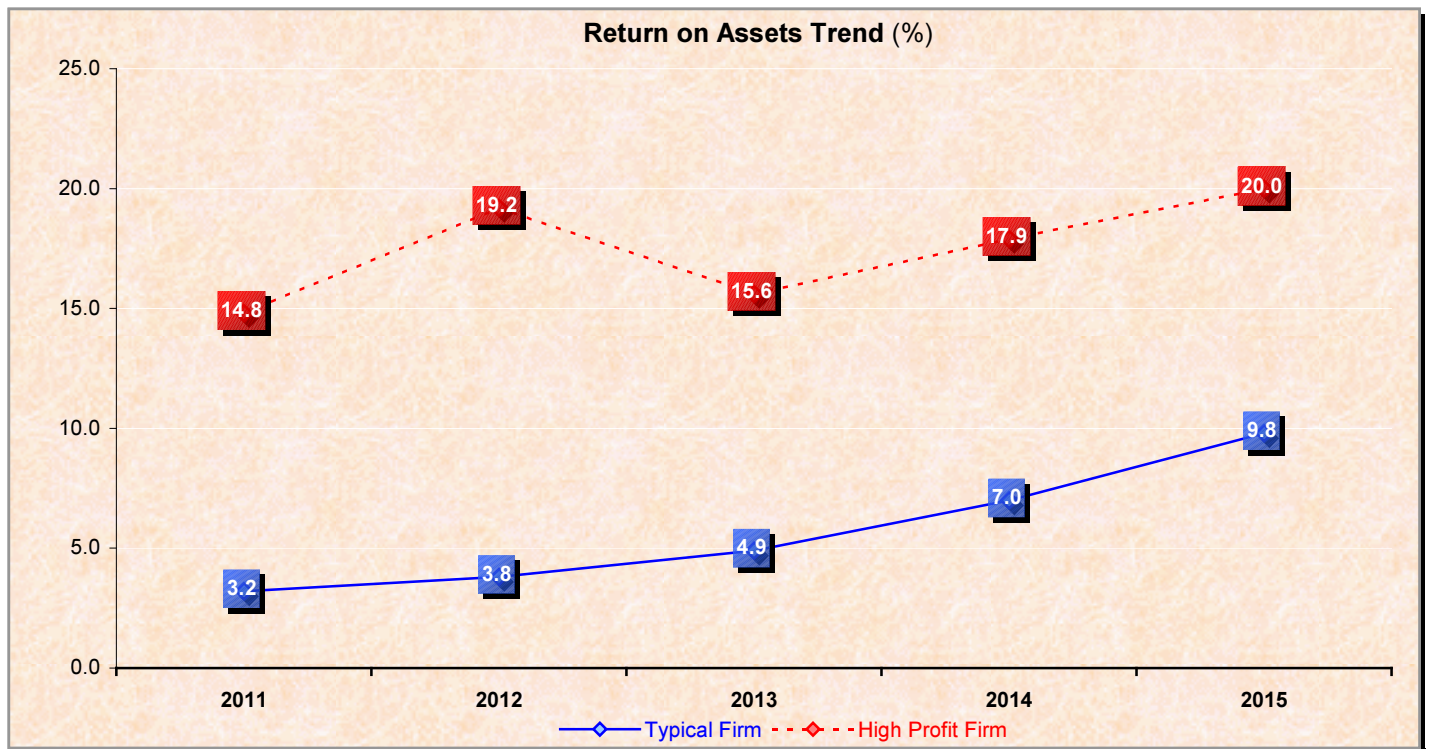
	<u>North- eastern</u>	<u>South- eastern</u>	<u>North Central</u>	<u>Western</u>	<u>Canada</u>
<b>Number of Firms Reporting</b>	3	11	21	4	5
<b>Shipments Received</b> (monthly avg.)		326	237	N/A	N/A
Sales \$ per Shipment Received		2,838	3,101	N/A	N/A
<b>Stockkeeping Units</b> (SKUs)		494	1,580	1,924	N/A
Sales \$ per SKU		23,173	6,824	9,009	N/A
Inventory \$ per SKU		1,196	656	678	N/A
<b>Customers</b>		195	354	150	636
Sales \$ per Customer		69,331	54,050	134,180	57,980
<b>Orders Shipped</b> (monthly avg.)		300	1,000	N/A	2,402
Sales \$ per Order		3,437	1,954	N/A	1,676
Lines per Order (avg.)		12.4	6.0	N/A	N/A
Sales \$ per Order Line		492	293	N/A	N/A
<b>Product Sales</b> (% of sales)					
Builders Hardware		39.0	44.2	50.1	55.0
Electronic Hardware		6.4	4.6	3.3	5.5
Metal Doors & Related Products		22.9	20.9	22.5	19.4
Wood Doors & Frames		20.2	15.7	14.8	8.9
Toilet Accessories & Partitions		5.0	3.3	1.3	5.3
Other		<u>6.5</u>	<u>11.3</u>	<u>8.0</u>	<u>5.9</u>
Total Sales		100.0	100.0	100.0	100.0
<b>Type of Sale</b> (% of sales)					
Contract Jobs		80.0	65.5	63.5	63.1
Non Contract Sales		<u>20.0</u>	<u>34.5</u>	<u>36.5</u>	<u>36.9</u>
Total Sales		100.0	100.0	100.0	100.0
<b>Manufacturers</b>		160	140	N/A	185
Sales \$ per Manufacturer		66,440	123,815	N/A	319,775
<b>Employees</b> (FTE)		40.0	51.0	39.5	98.0
Sales \$ per Employee		287,982	327,203	341,306	312,590
Gross Margin \$ per Employee		86,116	104,433	103,951	103,550
Salary \$ per Employee		52,123	58,037	67,044	63,432
Payroll \$ per Employee		60,908	74,928	85,038	70,270
Payroll Expense (% of sales)		22.1	21.5	24.4	25.4
Benefits (% of total payroll)		15.7	17.1	15.9	10.4
Personnel Productivity Ratio		66.0	63.1	68.5	68.1
<b>Direct Labor Employees</b>					
Firms With Direct Labor Employees (% of firms)		70.0	81.0	N/A	75.0
Direct Labor FTEs (at firms with them)		16.0	10.0	N/A	N/A

# Trends

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



# Trends



# 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.

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>Number of Firms Reporting</b>	46	47	43	42	45
<b>Typical \$ Sales Volume</b>	12,839,338	12,597,940	15,615,088	16,309,393	16,603,633
Sales Change (% from prior year)	3.1	-0.2	9.8	3.7	4.7
<b>Strategic Profit Model Ratios</b>					
Profit Margin (pre-tax %)	1.2	1.4	1.8	2.8	3.5
Asset Turnover	2.7	2.7	2.7	2.5	2.8
Return on Assets (pre-tax %)	3.2	3.8	4.9	7.0	9.8
Financial Leverage	1.8	1.6	1.5	1.5	1.8
Return on Net Worth (pre-tax %)	5.8	6.1	7.3	10.5	17.6
<b>Income Statement</b> (% of sales)					
<b>Net Sales</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Cost of Goods Sold</b>					
Materials	N/A	N/A	67.0	67.0	65.0
Direct Labor	N/A	N/A	2.4	1.9	2.8
Other Cost of Goods Sold	<u>N/A</u>	<u>N/A</u>	<u>0.4</u>	<u>0.6</u>	<u>1.4</u>
<b>Cost of Goods Sold</b>	<b>72.1</b>	<b>70.1</b>	<b>69.8</b>	<b>69.5</b>	<b>69.2</b>
<b>Gross Margin</b>	<b>27.9</b>	<b>29.9</b>	<b>30.2</b>	<b>30.5</b>	<b>30.8</b>
<b>Personnel Expenses</b>					
Executive Salaries & Bonuses	3.3	3.1	3.2	3.2	3.2
Sales Salaries & Commissions	7.5	6.8	7.6	6.6	8.1
Warehouse & Delivery Wages	1.5	1.9	1.9	1.5	1.4
All Other Employee Wages	<u>4.4</u>	<u>5.1</u>	<u>3.7</u>	<u>5.6</u>	<u>4.6</u>
Total Salaries, Wages & Bonuses	16.7	16.9	16.4	16.9	17.3
Payroll Taxes (FICA, workers' comp. & unemp.)	1.5	1.6	1.6	1.5	1.5
Group Insurance (medical, hospitalization, etc.)	1.1	1.4	1.4	1.4	1.2
Employee Benefits (profit sharing, pension, etc.)	<u>0.4</u>	<u>0.4</u>	<u>0.5</u>	<u>0.6</u>	<u>0.5</u>
<b>Total Personnel Expenses</b>	<b>19.7</b>	<b>20.3</b>	<b>19.9</b>	<b>20.4</b>	<b>20.5</b>
<b>Occupancy Expenses</b>					
Utilities (heat, light, power, water)	0.3	0.3	0.3	0.3	0.3
Telephone	0.3	0.3	0.3	0.2	0.2
Building Repairs & Maintenance	0.2	0.2	0.2	0.2	0.2
Rent or Real Estate Ownership	<u>1.4</u>	<u>2.0</u>	<u>2.0</u>	<u>1.8</u>	<u>1.5</u>
<b>Total Occupancy Expenses</b>	<b>2.2</b>	<b>2.8</b>	<b>2.8</b>	<b>2.5</b>	<b>2.2</b>
<b>Other Operating Expenses</b>					
Advertising & Promotion	0.1	0.1	0.1	0.0	0.1
Vehicle Expenses	0.9	1.1	1.0	1.0	0.9
Insurance (business liability & casualty)	0.3	0.3	0.4	0.4	0.4
Depreciation	0.4	0.6	0.6	0.4	0.4
Bad Debt Losses	0.1	0.0	0.1	0.1	0.1
All Other Operating Expenses	<u>2.9</u>	<u>3.0</u>	<u>3.3</u>	<u>2.7</u>	<u>2.8</u>
<b>Total Other Operating Expenses</b>	<b>4.7</b>	<b>5.1</b>	<b>5.5</b>	<b>4.6</b>	<b>4.7</b>
<b>Total Operating Expenses</b>	<b>26.6</b>	<b>28.2</b>	<b>28.2</b>	<b>27.5</b>	<b>27.4</b>
<b>Operating Profit</b>	<b>1.3</b>	<b>1.7</b>	<b>2.0</b>	<b>3.0</b>	<b>3.4</b>
Other Income	0.2	0.1	0.2	0.2	0.2
Interest Expense	0.3	0.4	0.4	0.4	0.1
Other Non-operating Expenses	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
<b>Profit Before Taxes</b>	<b>1.2</b>	<b>1.4</b>	<b>1.8</b>	<b>2.8</b>	<b>3.5</b>

# Trends

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>Typical Total \$ Assets</b>	4,755,310	4,665,904	5,783,366	6,523,757	5,929,869
<b>Assets</b> (% of assets)					
Cash & Marketable Securities	6.9	7.2	8.0	9.3	8.3
Trade Accounts Receivable	47.4	53.4	50.4	47.1	50.5
Inventory	29.9	25.2	24.0	28.7	28.1
Other Current Assets	<u>2.4</u>	<u>2.1</u>	<u>3.1</u>	<u>1.9</u>	<u>2.3</u>
Total Current Assets	86.6	87.9	85.5	87.0	89.2
Fixed & Noncurrent Assets	<u>13.4</u>	<u>12.1</u>	<u>14.5</u>	<u>13.0</u>	<u>10.8</u>
Total Assets	100.0	100.0	100.0	100.0	100.0
<b>Liabilities and Net Worth</b> (% of sales)					
Trade Accounts Payable	19.9	21.9	16.9	19.6	21.9
Notes Payable	9.7	3.0	5.2	3.6	4.9
Other Current Liabilities	<u>9.5</u>	<u>6.4</u>	<u>7.5</u>	<u>8.4</u>	<u>12.0</u>
Total Current Liabilities	39.1	31.3	29.6	31.6	38.8
Long Term Liabilities	4.0	5.3	4.5	3.1	4.3
Net Worth or Owner Equity	<u>56.9</u>	<u>63.4</u>	<u>65.9</u>	<u>65.3</u>	<u>56.9</u>
Total Liabilities & Net Worth	100.0	100.0	100.0	100.0	100.0
<b>Financial Ratios</b>					
Current Ratio	2.3	2.6	2.9	3.1	2.2
Quick Ratio	1.6	2.0	2.0	1.9	1.5
Accounts Payable to Inventory (%)	65.1	64.0	55.2	58.3	48.0
Accounts Payable Payout Period (days)	21.5	26.6	26.0	23.5	20.0
Debt to Equity	0.7	0.6	0.5	0.5	0.6
EBIT to Total Assets (%)	4.6	5.0	5.6	8.4	11.1
Times Interest Earned	6.9	7.4	8.2	12.8	13.8
<b>Asset Productivity</b>					
Cash Sales (% of total sales)	2.5	4.0	3.0	3.0	4.0
Average Collection Period (days)	60.6	63.2	65.2	68.9	69.8
Bad Debt Losses (% of net sales)	0.1	0.0	0.1	0.1	0.1
Inventory Turnover	7.4	7.1	7.7	6.8	6.5
Inventory Holding Period (days)	49.6	51.6	47.4	53.8	55.9
Sales to Inventory Ratio	10.4	11.0	11.3	10.1	9.6
Gross Margin Return on Inventory (%)	315.6	330.6	338.4	289.2	311.6
<b>Cash Flow Cycle</b>					
Average Collection Period (days)	60.6	63.2	65.2	68.9	69.8
Plus Inventory Holding Period (days)	<u>49.6</u>	<u>51.6</u>	<u>47.4</u>	<u>53.8</u>	<u>55.9</u>
Gross Cash Flow (days)	110.2	114.8	112.6	122.7	125.7
Minus A/P Payout Period (days)	<u>21.5</u>	<u>26.6</u>	<u>26.0</u>	<u>23.5</u>	<u>20.0</u>
Cash Cycle (days)	88.7	88.2	86.6	99.2	105.7
<b>Growth &amp; Cash Sufficiency</b>					
Growth Potential Index (%)	5.9	7.4	6.7	9.3	16.1
Cash to Current Liabilities (%)	11.0	14.2	6.6	12.5	6.6
Defensive Interval (days)	24.6	28.1	18.0	23.5	14.1
Sales to Working Capital	5.0	5.5	4.9	4.9	5.6



# Trends

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<b>Shipments Received</b> (monthly avg.)	215	228	395	315	280
Sales \$ per Shipment Received	2,519	2,558	2,452	2,834	2,833
<b>Stockkeeping Units</b> (SKUs)	1,165	1,200	1,273	1,532	1,320
Sales \$ per SKU	8,286	6,328	7,691	8,419	9,800
Inventory \$ per SKU	778	586	730	706	891
<b>Customers</b>	227	201	258	230	210
Sales \$ per Customer	33,606	48,357	35,871	49,070	58,628
<b>Orders Shipped</b> (monthly avg.)	370	387	401	360	360
Sales \$ per Order	2,139	2,081	2,210	2,340	2,401
Lines per Order (avg.)	8.0	9.0	8.0	7.0	8.0
Sales \$ per Order Line	214	297	300	347	328
<b>Product Sales</b> (% of sales)					
Builders Hardware	40.4	41.9	45.3	44.8	44.5
Electronic Hardware	6.0	4.8	4.8	4.8	5.1
Metal Doors & Related Products	24.2	25.8	20.1	21.4	21.5
Wood Doors & Frames	17.8	15.5	17.6	16.2	16.6
Toilet Accessories & Partitions	3.7	3.8	3.4	3.3	3.7
Other	<u>7.9</u>	<u>8.2</u>	<u>8.8</u>	<u>9.5</u>	<u>8.6</u>
Total Sales	100.0	100.0	100.0	100.0	100.0
<b>Type of Sale</b> (% of sales)					
Contract Jobs	72.0	70.0	69.0	67.0	69.5
Non Contract Sales	<u>28.0</u>	<u>30.0</u>	<u>31.0</u>	<u>33.0</u>	<u>30.5</u>
Total Sales	100.0	100.0	100.0	100.0	100.0
<b>Manufacturers</b>	101	107	125	147	150
Sales \$ per Manufacturer	123,785	98,905	102,064	102,591	112,351
<b>FTE Employees</b>	39	39	45.0	46.5	47.0
Sales \$ per Employee	303,149	306,186	324,648	318,745	314,323
Gross Margin \$ per Employee	84,500	97,617	96,319	97,775	103,474
Salary \$ per Employee	48,161	51,198	59,600	56,028	57,282
Payroll \$ per Employee	57,070	60,694	72,302	69,518	74,552
Payroll Expense (% of sales)	19.7	20.3	22.3	22.3	23.3
Benefits (% of total payroll)	16.7	16.5	15.1	16.0	15.6
Personnel Productivity Ratio	70.6	67.9	66.0	66.9	66.6
<b>Direct Labor Employees</b>					
Firms With Direct Labor Employees (% of firms)	N/A	N/A	73.7	70.6	78.0
Direct Labor FTEs (at firms with them)	N/A	N/A	9.5	12.0	11.5

# Ratio Calculation

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<u>Ratio</u>	<u>Calculation</u>	<u>Comment</u>
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)	$\text{Avg. Collection Period} + \text{Inventory Holding Period} - \text{Accounts Payable Payout Period}$	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

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<u>Ratio</u>	<u>Calculation</u>	<u>Comment</u>
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	$\frac{\text{Profit After Taxes} \times 100}{\text{AR} + \text{Inventory} - \text{AP}}$	Measures how fast the firm can grow using internally generated funds
Personnel Productivity Ratio	$\frac{\text{Payroll Expense} \times 100}{\text{Gross Profit}}$	Measures payroll expense as a percent of gross margin earned
Profit Margin	$\frac{\text{Profit Before Taxes} \times 100}{\text{Net Sales}}$	Measures profit earned as a percentage of net sales
Quick Ratio	$\frac{\text{Cash} + \text{Accounts Receivable}}{\text{Current Liabilities}}$	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	$\frac{\text{Net Sales}}{\text{Current Assets} - \text{Current Liabilities}}$	Measures ability to generate sales without tying up working capital
Times Interest Earned	$\frac{\text{Profit Before Taxes} + \text{Interest}}{\text{Interest}}$	Measures number of times earnings will cover interest payments