

# **An Analysis of Financial Performance in Distribution 2015**

**Prepared For  
DHI**

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**December 2016**

## Overview

This report analyzes the profitability and operational statistics for distributors in twenty-eight different lines of trade, focusing on results for 2015. The goal is to help distributors understand the change in financial performance across all of distribution and for their specific industry as well.

The analysis focuses on five critical profit variables (CPVs): 1) Sales growth, 2) the gross margin percentage, 3) the operating expense percentage, 4) inventory turnover, and 5) the average collection period (often called the days sales outstanding). These are the factors that combine to produce profit for an individual firm and an individual line of trade.

In analyzing the CPVs, two conflicting realities quickly emerge. Namely, distributors are all the same, while simultaneously, they are all different. They are all the same in that there is price competition in every industry, employee productivity is always a challenge and the like. In short, all distributors share a common concern of trying to improve their internal operations. This makes even small year-over-year improvements in the CPVs critical.

At the same time, distributors are all different in terms of the financial results they produce, even given their common concerns. For the twenty-eight different lines of trade in distribution there are wide variations in virtually every important metric in determining overall profitability. For example, the lowest gross margin percentage for any line of trade in this analysis is 6.5% of sales, while the highest is 47.3%.

Such differences make it difficult, but not impossible, to compare performance across lines of trade. That is, the analysis can't simply look at how one industry's gross margin compares to other industries. Some adjustments must be made to allow for direct comparisons. The methods required to make comparisons are covered in the next section on Methodology. That section should not be skipped.

## **An Important Note on Methodology: Please Read Carefully**

This report focuses on two issues. First, how well did individual lines of trade do on key performance metrics in 2015? Second, to what extent did those metrics change by line of trade between 2014 and 2015? In short, how good are the results and how much did the results change?

As stated in the previous section it is not possible to put high-gross margin industries together with low-gross margin ones and come to any conclusion. The gross margin numbers, along with inventory turnover and the like, must be converted to some common denominator to make conclusions possible.

The procedure employed here involves converting absolute metrics into percentage change metrics. The percentage change figures measure how much better, or worse, a specific industry performed in 2015 versus 2014. This will allow an analysis of which industries are improving and which are not.

For example, if an industry with an average inventory turnover of 2.0 times experienced a .5 turn improvement in 2015, the percentage improvement in turnover was 25.0% ( $.5 \div 2.0 = 25.0\%$ ). In an industry with 5.0 turns per year as a starting point, the same .5 turnover improvement would only represent a 10.0% improvement.

To compare across industries all of the annual changes between 2014 and 2015 for gross margin, operating expenses, inventory turnover and the DSO were converted to percentages. In that way the percentage increase, or decline, are directly comparable to other industries. The focus is always on how much better or worse an industry performed.

## Return On Assets Trends for the Last Five Years

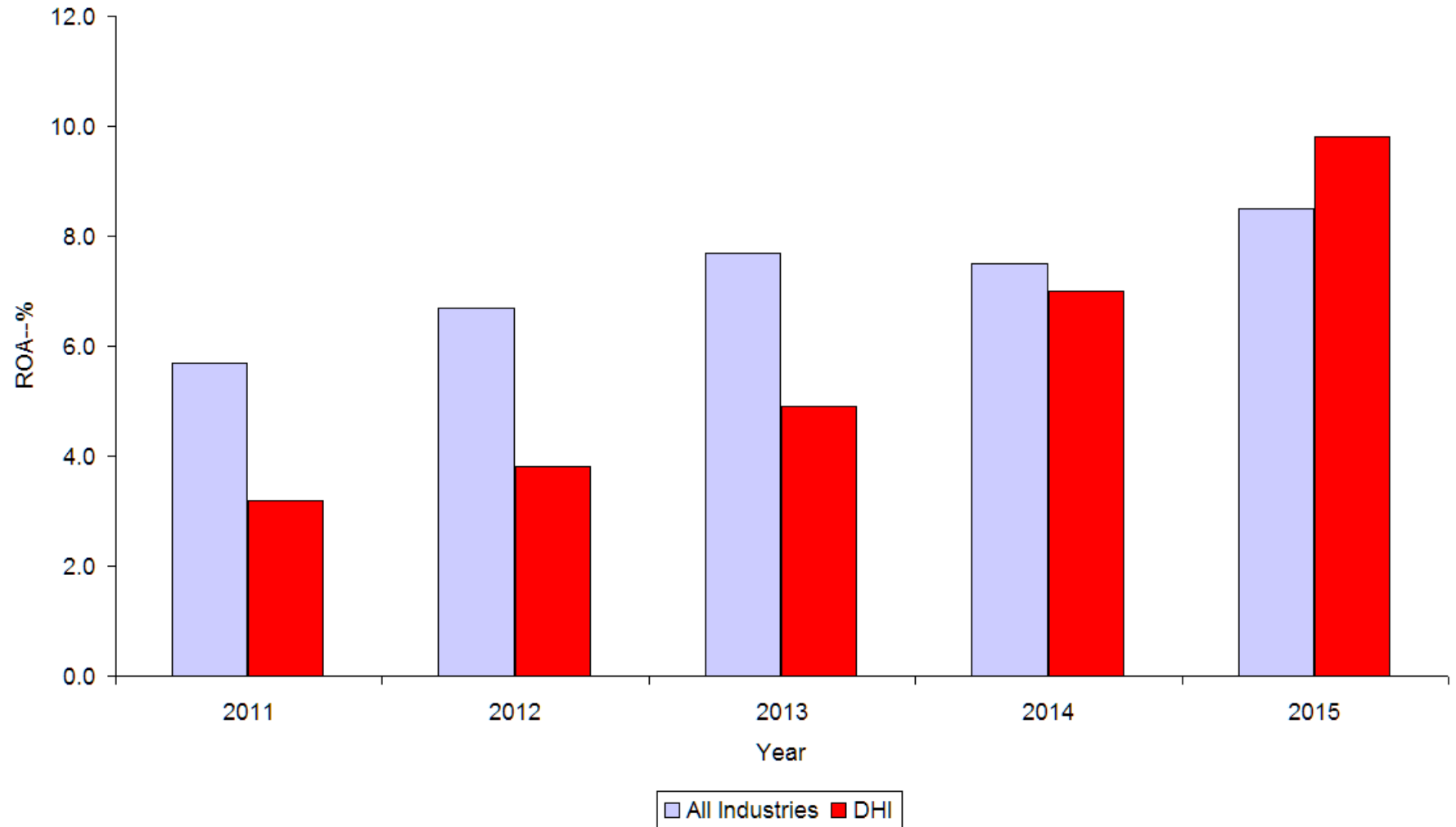
Before examining the individual CPVs, it is useful to measure overall profit performance. That is, how well did distributors combine the CPVs. **Exhibit 1** does this by examining Return on Assets (ROA) for the last five years for which information is currently available.

Return on Assets (ROA) is calculated by taking pre-tax profits and dividing by total assets. For distributors, ROA is the best overall measure of profitability. Most analysts argue that an ROA of at least 5.0% is essential for long-term success. For distribution, anything in excess of 10.0% would be considered outstanding.

Exhibit 1 outlines the median Return on Asset performance for the twenty-eight lines of trade for the years 2011 through 2015. The overall pattern reflects a modest, but important, improvement in ROA between 2011 and 2013 followed by a flattening in results after that. Even with the flattening the ROA for 2015 was the highest in the five-year time frame, coming in at 8.5%.

The exhibit also provides comparison figures for DHI members during this period. Specifically, DHI experienced the greatest improvement in profitability of any industry studied during the five years. For the first time, ROA figures are above distribution as a whole.

**Exhibit 1**  
**Return on Assets by Year**



## Sales Growth by Industry Segment

The ability to increase sales systematically is one of the key drivers of profit. At the same time, the importance of sales growth is somewhat overstated. Exceptional rates of growth are not required. What is needed is enough growth to allow the firm to offset the impact of inflation on expenses with some relative ease.

Different segments of distribution often produce different rates of growth. Consequently, for this analysis (and all of the other CPVs) performance is broken out by three different global industry segments.

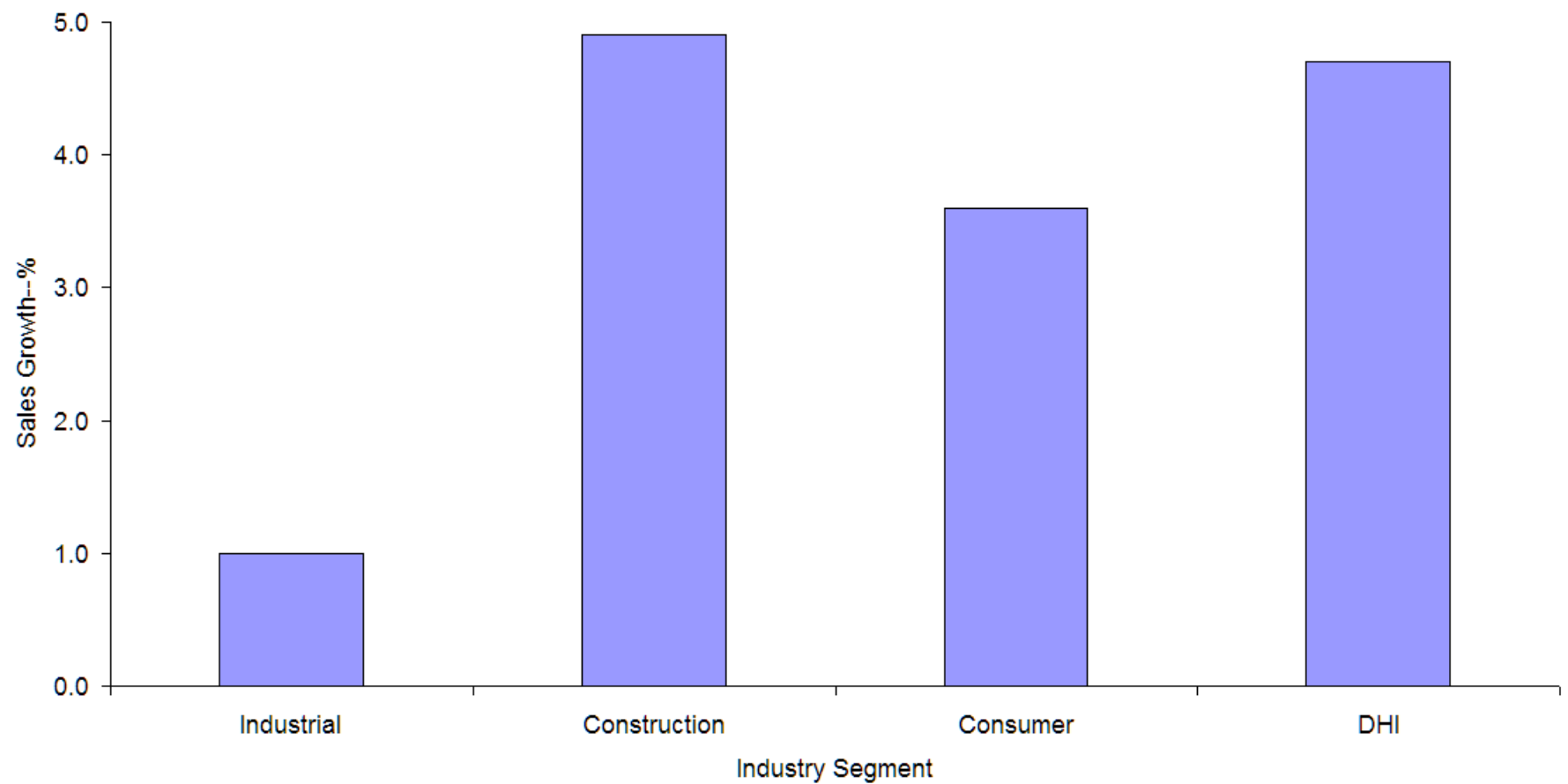
- **Industrial**—Distributors selling largely to “the factory floor.”
- **Construction**—Businesses selling primarily to contractors.
- **Consumer**—Entities selling either consumer products or products that facilitate the sale of consumer products.

**Exhibit 2** reflects a reality of distribution in today's environment—virtually every segment is mature with modest rates of growth. In today's moderate inflation environment, growth of somewhere around 5.0% is considered sufficient to help firms offset expense increases and enhance profit. For 2015 no segment achieved this level.

The Industrial segment was especially hard hit in terms of growth, coming in at only 1.0%. Construction enjoyed the highest growth rate, but still fell short of the 5.0% mark, with growth of 4.9%. In short, no industry was able to count on rapid growth to drive higher profit. They had to focus on the other CPVs.

For DHI members, sales growth was 4.7% during 2015. This was in line with all of distribution.

**Exhibit 2**  
**Sales Growth by Industry Segment**  
**2015 Versus 2014**



## Gross Margin Changes by Industry Segment

**Exhibit 3** indicates that the year 2015 was characterized by important improvements in gross margins. This was true across all three global industry segments. However, individual lines of trade within those segments experienced significant deviations from the norm.

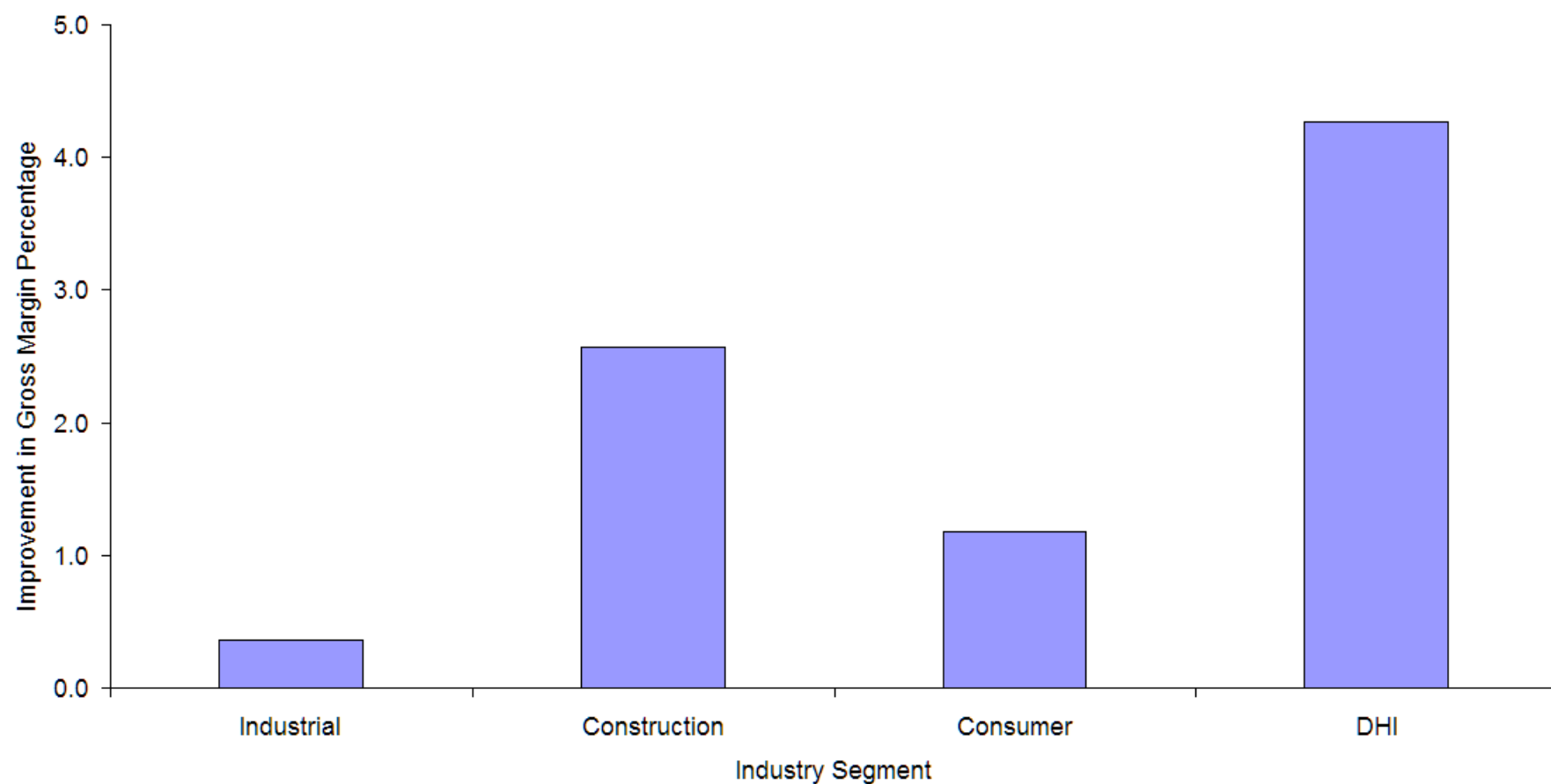
It is crucial to remember from the Methodology page how the changes in gross margin are being calculated. In 2014 the median gross margin percentage for DHI members was 30.5% of sales. In 2015 it was 31.8%. This means that between 2014 and 2015 there was a change of 1.3 percentage points. The relative change was 4.3% ( $1.3 \div 30.5$ ). This was the primary factor behind the increase in ROA.

Any gross margin change, even if it appears small, is critical. The ratio reflects the change in the gross margin dollars that the typical firm would have experienced if sales had remained constant. While the numbers are typically small, their profit impact is large.

Improvements in the gross margin percentage are especially important in mature industries where sales growth tends to be modest. Every sales dollar must generate the maximum margin dollars to cover expenses and generate a profit.



**Exhibit 3**  
**The Percentage Improvement or Deterioration**  
**in Gross Margin Percentage**  
**2015 Versus 2014**



## Operating Expense Changes by Industry Segment

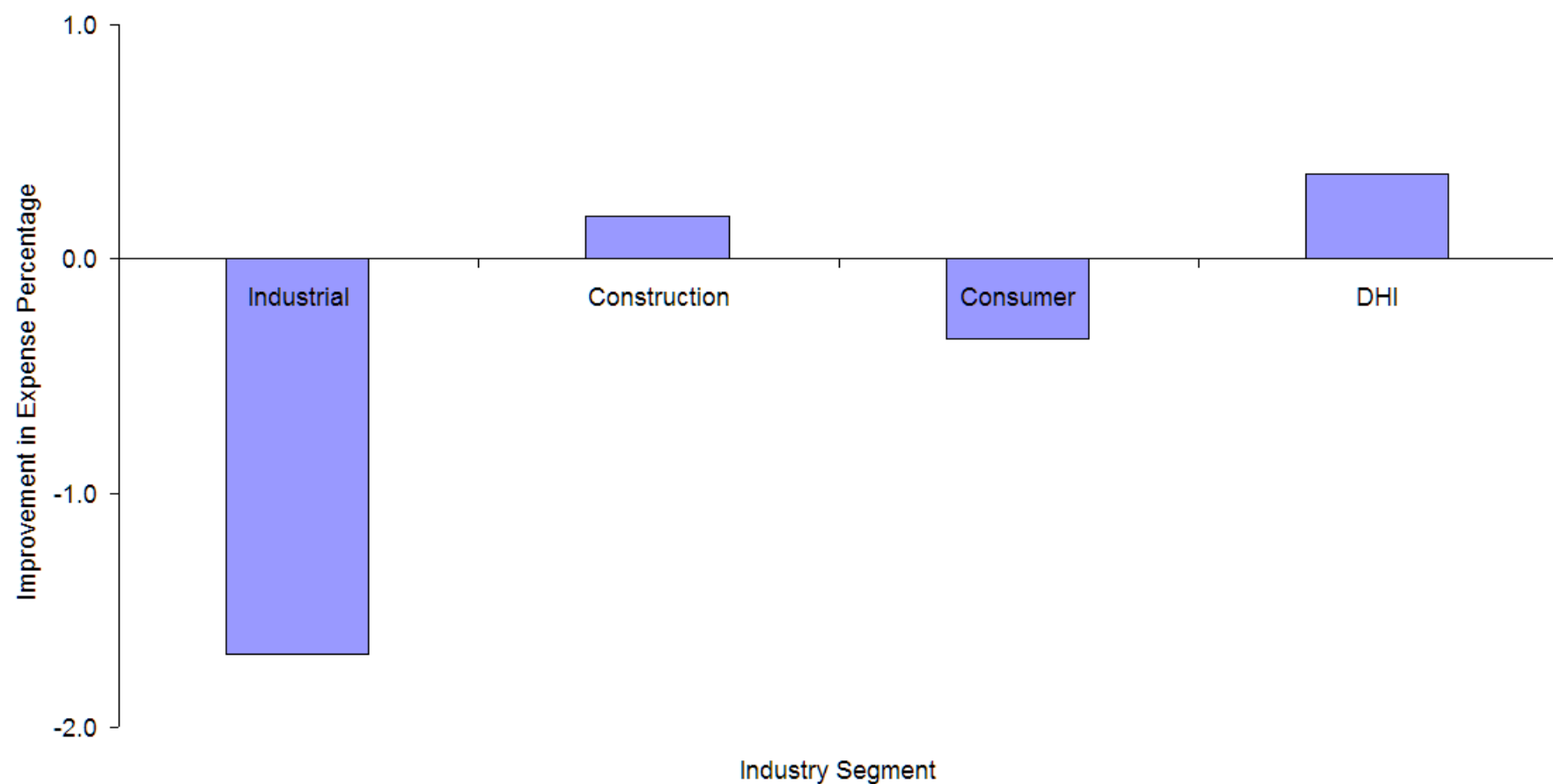
**Exhibit 4** tracks the improvement or deterioration in operating expense percentages. That means that all positive numbers reflect doing better with regard to operating expenses (expenses as a percent of sales declined). Any negative numbers indicate an increase in the operating expense percentage.

Clearly, 2015 was an operating expense challenge. For two of the three segments' operating expense performance deteriorated. The expense challenges tended to offset the gross margin improvements outlined in Exhibit 3.

In general, changes in operating expense percentages are heavily influenced by the rate of sales growth. As was noted previously, the industrial segment had very modest sales growth. This lead fairly directly to the decline in expense performance identified in the exhibit. The changes for construction and consumer segments also tracks closely with sales growth results.

For DHI members there was a 0.4% positive relative change in the operating expense percentage. Specifically, operating expenses were 27.5% of sales in 2014 and 27.4% in 2015, resulting in a change of -0.1%. This means that the operating expense percentage got better by this amount. As a result, the relative change was  $0.1\% \div 27.5\% = 0.4\%$  better.

**Exhibit 4**  
**The Percentage Improvement or Deterioration**  
**in the Operating Expense Percentage**  
**2015 Versus 2014**

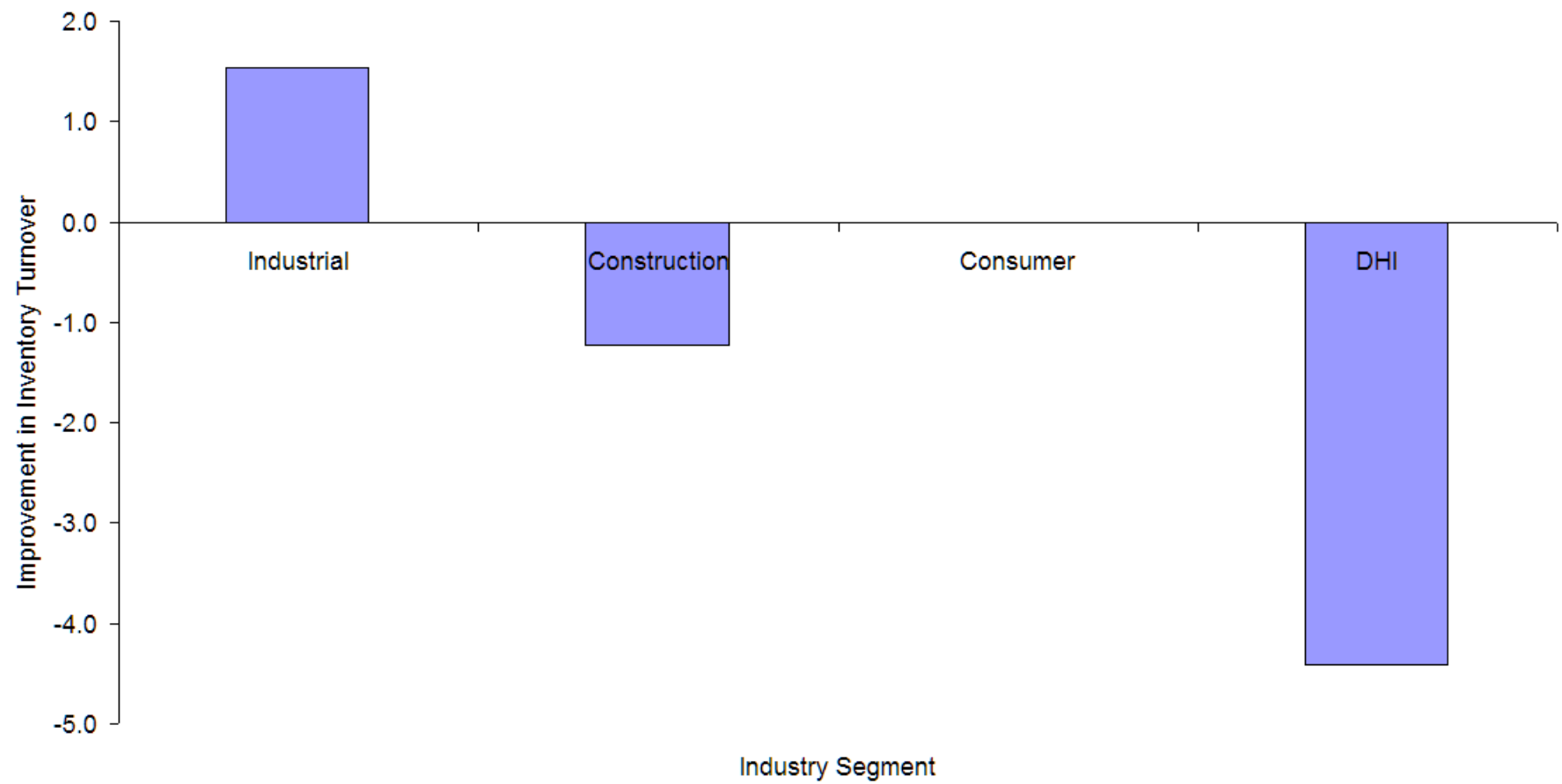


## Inventory Turnover Changes by Industry Segment

Despite popular mythology, neither Inventory Turnover nor the Days Sales Outstanding have a very large impact on profitability for distributors. They do, of course, have a large impact on cash flow. Both ratios have to be viewed in that particular context.

**Exhibit 5** indicates that the changes in inventory turnover levels followed no clear pattern in 2015, with industrial performing better, construction doing worse and the consumer segment experiencing no change. For DHI members there was a change of -4.4%.

**Exhibit 5**  
**The Percentage Improvement or Deterioration**  
**in Inventory Turnover**  
**2015 Versus 2014**



## The Average Collection Period Changes by Industry Segment

Before reviewing **Exhibit 6** it is important to note once again that all of the positive figures on the graph represent a decrease in the Average Collection Period (or DSO). That is, they represent an improvement. It is also useful to be aware that the collection period is an extremely volatile ratio year to year. It is impacted not only by management actions, but unusual sales activity that may take place toward the end of the fiscal year.

Like inventory, there was no clear pattern across all industries for the collection period. Again, this reflects the natural volatility of this ratio. For DHI members there was a change of -1.3%.

**Exhibit 6**  
**The Percentage Improvement or Deterioration**  
**in the Average Collection Period**  
**2015 Versus 2014**

