An Analysis of Financial Performance in Distribution
2019

Prepared Exclusively For
NFDA

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Overview

This report analyzes the profitability and operational statistics for distributors in seventeen different lines of trade, focusing on results for 2019. The goal is to help distributors understand the change in financial performance across all of distribution and for their specific industry as well.

It may well seem that the results for 2019 are merely ancient history at this point. The reality is that the information in this report provides guidance as to which industries are moving forward and which are regressing. That guidance has important strategic implications.

The analysis focuses on Return on Assets (ROA) as the overall measure of financial performance. It also looks at five critical profit variables (CPVs) that drive ROA: 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).

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 seventeen 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 6.1% of sales, while the highest is 45.2%.

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 2019? Second, to what extent did those metrics change by line of trade between 2018 and 2019? 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 conversion process is straightforward, but decidedly alien to management’s thinking.

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 2019 versus 2018. 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 2019, the percentage improvement in turnover was 25.0% (.5 ÷ 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 2018 and 2019 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.
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 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 seventeen lines of trade for the years 2015 through 2019, along with the median ROA for NFDA members. The median member means that half of the firms have a higher ROA and half have a lower one.

The overall pattern indicates that NFDA firms were consistently above all other distributors on ROA. For 2019, the median ROA for NFDA members was 11.6% compared to 7.8% for all of the industries in the report.
ROA Performance by Industry Segment

Different segments of distribution often produce different rates levels of Return on Assets, even in the same economic environment. Consequently, for this analysis (and all of the CPVs in the following exhibits) 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.

For this analysis, NFDA is in the Industrial segment.

**Exhibit 2** indicates that NFDA members had a higher ROA than other firms in its segment, 11.6% versus 8.0%. 
Exhibit 2
ROA by Distribution Segment

Distribution Segment

ROA

All
Industrial
Construction
Consumer
NFDA
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.

Exhibit 3 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.

As always, growth rates varied by segment. For 2019, the Industrial segment experienced the fastest growth at 4.9%, followed by Construction at 3.4% and Consumer at 0.6%. For the year NFDA members grew by 1.7% versus the 4.9% for all of the Industrial segment.
Exhibit 3
Sales Growth by Industry Segment
2019 Versus 2018

Sales Growth-%

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>2019 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>5.0</td>
</tr>
<tr>
<td>Construction</td>
<td>3.0</td>
</tr>
<tr>
<td>NFDA</td>
<td>2.0</td>
</tr>
<tr>
<td>Consumer</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Gross Margin Changes by Industry Segment

CAUTION: This exhibit does not say what you think it says. The results are attempting to compare industry segments (and individual firms) with very different gross margin percentages. Simply looking at the change in the gross margin percentage will be misleading. Relative improvements must be calculated.

An actual calculation should clarify the process. For NFDA members the typical gross margin percentage in 2019 was 35.5%, while in 2018 it was 36.2%. This means that for the year the percentage point change was -0.7. The relative change shown in the graph was -1.9% (-0.7 ÷ 36.2%).

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.

As can be seen in Exhibit 4, the NFDA gross margin change was not as good as the industry segment as a whole. This represents a challenge to improving profit performance.
Exhibit 4
The Change in Gross Margin Percentage by Industry Segment
2019 Versus 2018

Industry Segment:
- Industrial
- Construction
- Consumer
- NFDA
Operating Expense Changes by Industry Segment

Exhibit 5 tracks the improvement or deterioration in operating expense percentages. That means that all negative numbers reflect doing better with regard to operating expenses (expenses as a percent of sales declined). Any positive numbers indicate an increase in the operating expense percentage.

As with gross margin, the numbers reflect the percentage change relative to the initial base for expenses. For NFDA members this means:

Operating Expenses 2018: 30.5
Operating Expenses 2019: 28.8
Change in the Expense Percentage: -1.7
Relative Change: \(-1.7 \div 30.5 = -5.6\%\)

In general, changes in operating expense percentages are heavily influenced by the rate of sales growth. The lower the level of sales growth, the more challenging it is to control operating expenses.
Exhibit 5
The Change in the Operating Expense Percentage by Industry Segment
2019 Versus 2018
Despite popular mythology, neither inventory turnover nor the Days Sales Outstanding has 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 6 indicates the percentage change in inventory turnover across all industry segments. NFDA experienced no change in its inventory turnover. There should have been no change in the cash position because of inventory.
Exhibit 6
The Change in Inventory Turnover by Industry Segment
2019 Versus 2018

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Percentage Change in Inventory Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>8.0</td>
</tr>
<tr>
<td>Construction</td>
<td>-4.0</td>
</tr>
<tr>
<td>Consumer</td>
<td>-4.0</td>
</tr>
<tr>
<td>NFDA</td>
<td>0.0</td>
</tr>
</tbody>
</table>
The Average Collection Period Changes by Industry Segment

Exhibit 7 provides the final percentage change information, this time for the Average Collection Period. It is important to note once again that negative changes represent a reduction in the Average Collection Period and represent improvements in most circumstances.

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. Even with that caveat, the ratio provides insights into how well the firm is managing accounts receivable.

For 2019, NFDA experienced a 3.5% decrease in the collection period. This has important positive implications for the typical firm’s cash position.
Exhibit 7
The Change in Average Collection Period by Industry Segment
2019 Versus 2018

Percentage Change in Collection Period

Industry Segment

- Industrial
- Construction
- Consumer
- NFDA