The Rule of 72: Having the Assets to Support Future Sales

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One of the most interesting concepts in financial analysis is what is commonly called the Rule of 72. It states the number of years required to double the value of an investment can be *estimated* by dividing the number 72 by the annual return on that investment. For example an investment with a 7.2 percent annual return would double in about ten years (72 * 7.2 = 10).

This seemingly innocuous rule has some very important implications for distributors. Firms that produce a higher level of return on their investment than typical firms can begin to systematically build a larger asset base quicker than the typical firm. They can then use that asset base to generate higher sales.

This report considers how different rates of return result in very different businesses in the future. It does so by examining two specific issues:

- **The Different Rates of Return for DHI Members** An analysis of the long-term implications of different profit levels.
- **Moving to a Higher Return** An examination of the requirements for moving to higher-profit levels.

THE DIFFERENT RATES OF RETURN FOR DHI MEMBERS

Exhibit 1 provides a comparison of typical and high-profit DHI members. The top set of numbers is for the typical member based upon the latest PROFIT report. The bottom set of numbers is for the high-profit firm in the same survey. To demonstrate the impact of profitability on sales potential over time, both firms are assumed to start with the same level of sales volume.

At present, the typical firm generates $15,000,000 in sales, operates on a gross margin percentage of 31 percent and generates $367,500 in *after-tax profits*. These results require a total asset investment of $6,000,000, producing an after-tax return on assets of 6.1 percent. Based upon the Rule of 72, the firm would double its asset investment in 11.8 years if it reinvested all of its profits.

In contrast, at the bottom of the exhibit, the high-profit firm generates the same sales, but produces a profit of $770,000 which yields an after-tax ROA of 12.8 percent. The Rule of 72 indicates it could double its asset base in only 5.6 years.

The final two columns of numbers track the performance of the typical and high-profit firm over time. The numbers intentionally assume no change in operating performance. This provides a clear view of the implication of different levels of profitability in the industry.

The first column of projected results (Year 5) shows performance five years out. This is a very typical planning horizon for many firms. The final column shows results in year twelve. This simply rounds the 11.8 figure from the Rule of 72 calculation for the typical firm.

A comparison of the current numbers and the figures for year twelve presents startling results. In the current year the high-profit firm has a profit that is 109.5 percent higher than the typical firm ($770,000 versus $367,500). However, by year twelve the difference has grown to 337.2 percent. The high-profit firm is systematically moving ahead of the typical one.

From a sales perspective, the typical firm has more or less doubled its sales volume from $15,000,000 to $30,612,845. At the same time the high-profit firm has the potential to grow to $63,876,377 in sales, an increase of 325.8 percent. Not only is the typical firm behind in terms of current profit, it is falling further behind in future sales potential and the additional profit those sales can generate.

There is no certainty that the higher sales number can be reached. The exhibit simply indicates what could be attained if profit levels remained the same and all additional profits were reinvested back into the business over time.

Clearly, the importance of being a high-profit firm is significant today. Its importance grows exponentially in the future. Typical firms need to plan to catch up to their high-profit competitors.

MOVING TO A HIGHER RETURN

In moving to a higher-profit level, there are three major concerns. All need to be address directly.

Benchmarking–Without comparison numbers from a financial benchmarking analysis, it is impossible for a firm's management to know if it is high-profit, typical or, even worse, low-profit. Essentially, the firm is flying blind with management hoping for the best.

DHI sponsors a benchmarking survey for its members called the PROFIT report, which provides detailed results for the typical and high-profit firms. In addition, it provides insight into how the high-profit firms achieve superior results. Participation in the report should be an essential activity for every firm.

Management Education–At the senior management level in most distribution firms, there is a fairly clear idea about what really drives profitability. However, at lower levels of the management ranks, this clear understanding gradually fades and maybe even disappears.

The problem becomes particularly acute when managers in different parts of the organization have their own unique ideas about what is important. When some managers are focused on sales generation, while others are intent on cost control, conflict inevitably arises. Only a clear understanding of profit relationships can overcome these competing points of view.

Proper Planning–The role of planning in generating higher profit levels cannot be overstated. Unfortunately, too many firms continue to plan in a manner that does not ensure improved performance in the future. Those firms simply plan sales, gross margin and expenses then hope it all works out and profit increases. It seldom does. Profit must be planned.

Firms should at least investigate the concept of profit-first planning. This approach starts with a specific profit goal for 2018 (?) and works backwards through the income statement and balance sheet to determine how the goal can be reached.

MOVING FORWARD

Firms with different levels of profitability (as measured by Return on Assets) face very different prospects for the future. Virtually every firm can grow its sales by reinvesting modest profits. However, firms with higher profit levels can reinvest a much larger amount. Slowly over time, the high-profit firms achieve a critical mass that other firms cannot reach.

Firms need to plan for higher profit and ensure that everybody in the firm knows where the firm is going. All of this needs to be supplemented with a strong dose of financial benchmarking. +

EXHIBIT 1
TWO DIFFERENT GROWTH PROFILES FOR DHI MEMBERS

Typical Firm Income Statement	Current Results	Year 5	Year 12
Net Sales	$15,000,000	$20,192,020	$30,612,845
Cost of Goods Sold	10,350,000	13,932,494	21,122,863
Gross Margin	4,650,000	6,259,526	9,489,982
Total Expenses	4,125,000	5,552,806	8,418,532
Profit Before Taxes	525,000	706,721	1,071,450
Income Taxes (30% of PBT)	157,500	212,016	321,435
Profit After Taxes	$367,500	$494,704	$750,015
Total Assets	$6,000,000	$8,076,808	$12,245,138
Return on Assets (After Taxes)	6.1%	6.1%	6.1%
High-Profit Firm Income Statement	**Current Results**	**Year 5**	**Year 12**
Net Sales	$15,000,000	$27,433,319	$63,876,377
Cost of Goods Sold	10,000,000	18,288,879	42,584,252
Gross Margin	5,000,000	9,144,440	21,292,126
Total Expenses	3,900,000	7,132,663	16,607,858
Profit Before Taxes	1,100,000	2,011,777	4,684,268
Income Taxes (30% of PBT)	330,000	603,533	1,405,280
Profit After Taxes	$770,000	$1,408,244	$3,278,987
Total Assets	$6,000,000	$10,973,328	$25,550,551
Return on Assets (After Taxes)	12.8%	12.8%	12.8%