MARKETING'S ROLE IN MANAGING ASSETS

by Michael Gunderson, Josh Detre and Michael Boehlje

In the June issue of *AgriMarketing* the DuPont Financial Analysis Model — a straightforward method for assessing the factors that influence a firm's financial performance — was introduced. This model identifies three "levers" of profitability for a firm as measured by return on equity; these levers are earns, turns and leverage. Clearly, earns and turns drive the income stream in the DuPont Model. In Part I of this series we illustrated why the marketing manager provides a "triple whammy" by improving the revenues in the income stream of the business.

In Part II we focus on the impact of managing assets on the investment and income streams in the DuPont Model. It is important to keep all elements of the DuPont Model and their relationships with each other in mind, even as the focus is narrowed to only asset management. The income and investment streams do have overlap because assets appear in both streams. Assets appear in the income stream in the turnover ratio, an indicator of how well the firm generates sales with its resources. Assets also appear in the investment stream in financial leverage, an indicator of the percentage of the firm's assets financed with equity rather than debt.

ASSETS IN THE INCOME STREAM

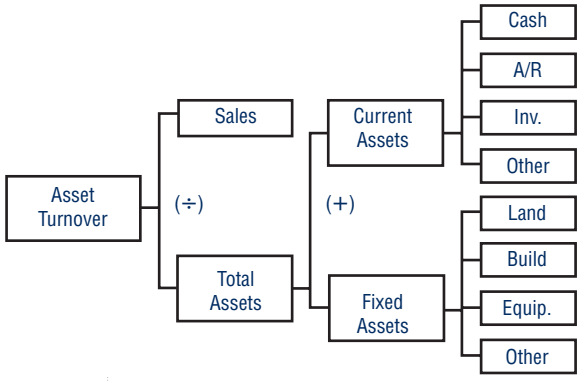
In the first part of this series the role of managing revenues in the income stream was considered at length. Let's now turn our attention to the role of managing assets in the income stream. The asset turnover ratio incorporates two elements — sales and assets. Total assets include current assets and non-current or fixed assets (Figure 1). It is unlikely that a marketing manager will influence fixed assets (relatively non-liquid assets such as land, equipment and buildings) to any measurable degree. The marketing manager can, however, have a large influence on current assets.

Generally assets are considered current if they can be converted into cash in the normal operations of the firm within the operating period. Typically current assets include cash on hand, accounts receivable and inventories. A marketing manager might have substantial influence on the terms of repayment (impacting accounts receivable) and the rate at which inventory is turned.

Accounts receivable is an important part of current assets that must be carefully managed. The marketing manager understands that better terms for customers can potentially increase sales. However, selling to a bad credit is worse than making no sale at all. In this situation, the business suffers from a loss in gross margin and a loss from the cost of the goods or services sold. Additionally, the firm might incur the cost of trying (usually unsuccessfully) to collect the debt. Finally, long payment terms slow accounts receivable turnover, reducing asset turnover. Therefore, the marketing manager should consider offering discounts for payments in cash or within 10 days of receipt as well as counsel to the sales force concerning sales to slow/no paying customers.

After we emphasized the importance of revenues in Part I, it might be tempting to suggest that sufficient inventory levels be kept to avoid stock-outs at all costs. However, this results in cash being tied up in relatively unproductive assets (additional inventory). It would be wiser to manage the inventory as carefully as possible to maximize shareholder value. The marketing manager can influence inventory by correctly forecasting sales and exploiting just-in-time (JIT) and other inventory management strategies.

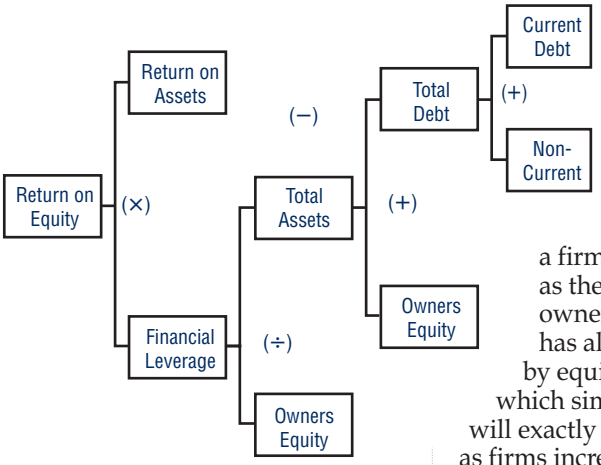
Figure 1. ASSETS' ROLE IN THE INCOME STREAM



Good forecasts are the simplest means of reducing the inventory stock while ensuring that sufficient product is available on time for customers. Correct forecasts of demand will reduce the size of "buffer stocks" needed to avoid stock outs. The demand for some agriculture inputs is relatively stable, and historical purchases can be used as a guide for predictions — although innovative products, new hybrids or cutting-edge technology might pose a greater challenge in accurately estimating sales.

This suggests that unique inventory strategies for different products or product lines might be needed. Rather than applying a general inventory rule across all products, the marketing and operations managers can work together to develop guidelines tailored to each product. JIT inventory management techniques have become increasingly popular and are often pointed to as one of the major factors in the success of Wal-Mart in the retailing sector. Transmitting information more rapidly to meet delivery demands on an as-needed basis can reduce the amount of unproductive inventory kept in stock. The investment in such technology to carry out JIT can be well worth it.

Figure 2. ASSETS' ROLE IN THE INVESTMENT STREAM



ASSETS IN THE INVESTMENT STREAM

Although the investment stream is primarily the concern of the CFO, it's important for all managers to understand the influence of capital structure on ROE. If the marketing and operating managers have worked to improve ROA, it would be disappointing if it were not appropriately leveraged to maximize the shareholder's value.

The accounting identity states that assets must be equal to equity and debt (Figure 2). The percentage of assets that are financed by debt will lever ROA to improve ROE as long as ROA exceeds the interest cost. Therefore, a well-performing firm earning a substantial ROA will want to use debt to finance the activities of the firm rather than the owners' equity. The cost of debt is fixed and any ROA exceeding that cost will accrue to the equity, creating additional shareholder value.

The degree to which a firm is levered is calculated as the ratio of total assets to owners' equity. A firm that has all of its assets financed by equity has a leverage of 1.0, which simply means that ROE will exactly equal ROA. However, as firms increase their amount of debt the leverage will increase. For example, if a firm has $100 million in assets and just $30 million in owners' equity, its leverage would be 3.33 (100 million/30 million). Therefore, the ROE would be 3.33 times as large as the ROA after adjusting for interest costs. In the example from Part I, the ROA was 7.62 percent, less an interest cost adjustment of 1.28 percent, giving an adjusted ROA of 6.34 percent. This adjusted ROA was levered by an asset-to-equity ratio of 1.21, resulting in an ROE of 7.68 percent. If the financial leverage were increased to 2.0 by increasing debt and decreasing the reliance on owners' equity, then the ROE would be a much more impressive 12.69 percent. It must be noted that these results require all else remains the same. It is likely, at some point, that increasing levels of debt will carry a higher interest rate. Therefore, additional debt must be handled carefully — borrowing more money means that the manager must work harder at managing the operating risk of the business.

The DuPont Model is an exceptionally useful tool that is easy to understand and apply to any firm. All numbers needed for a thorough analysis are identified on accurate accounting statements. The model requires simple calculations that allow for a frank identification of strengths and weaknesses in the financial performance of the firm. It is a functional tool that enables marketing managers to communicate with CFOs and CEOs regarding their role in improving the performance of the business. **AM**

Note: *A corrected version of the table titled "DuPont Model For An Example Agribusiness" from Part I of this series can be found at http://www.agrimarketing.com/show_story.php?id=33238.*

Michael Gunderson and Josh Detre are USDA National Needs Fellows and Michael Boehlje is a professor with the Center for Food and Agricultural Business at Purdue University. Additional information on this topic can be obtained by e-mailing Dr. Boehlje at boehljem@purdue.edu.