

Shareholder Value Advisors

Measuring Business Unit Contribution to Shareholder Value: A Primer

Overview

- Our objective in measuring business unit contribution to shareholder value is to establish each business unit's contribution to the parent company's dollar excess return. Excess return is the dollar difference, for a measurement period, between actual and expected shareholder wealth (see definitions on next page for more detail). For a publicly traded parent company, we have a direct market measure of excess return, but at the business unit level, we need an operating measure of the business unit's contribution to shareholder value.

Methodology

- The best operating measure of a business unit's contribution to shareholder value over a measurement period is the capitalized value of its excess EVA improvement over the measurement period (see definitions on next page for more detail). We estimate business unit contribution to shareholder value in the following steps:
 1. Select a measurement period for analysis. We typically use a five year period for analysis.
 2. Calculate the parent company's excess return over the measurement period.
 3. Calculate expected EVA improvement (EI) for the parent company and each business unit at the start of the measurement period. Estimating EI for the parent company requires a regression model, based on peer data, of changes in future growth value. Allocating EI to the business units requires regression models, based on peer data, of market value levels. See Setting Operating Performance Targets for more detail.
 4. Calculate excess EVA improvement, i.e., $\Delta EVA - EI$, for each year of the measurement period for the parent company and each business unit.
 5. Calculate the capitalized future value of excess EVA improvement over the measurement period for the parent company and each business unit. The capitalization multiples are derived from the peer model of future growth value changes. The model normally shows a higher multiple for positive EVA companies than for negative EVA companies.
 6. Validate the analysis by showing that the capitalized future value of excess EVA improvement for the parent company is close to the parent company's actual dollar excess return.
 7. Rank the business units by their contribution to the parent company's dollar excess return.
- A similar analysis can be used to estimate the prospective contribution to shareholder value of each business unit's long term plan.

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Definitions – Excess Return

- The excess return for a measurement period is the difference between actual and expected shareholder wealth at the end of the measurement period. Expected shareholder wealth is equal to beginning shareholder wealth increased each year by the company's cost of equity capital. Actual shareholder wealth is the sum of the shareholder wealth at the end of the measurement period plus the future value of free cash flow over the measurement period. See example below for sample 5-year excess return calculation:
- Assumptions:
 - Beginning shareholder wealth is \$500 million
 - Cost of equity capital is 12%
 - Company pays no dividends and raises no new capital
 - \$100 million of stock is repurchased at the end of year 3
 - Actual shareholder wealth (price times shares outstanding) is \$600 million at the end of year 5.
- Calculations:
 - Expected shareholder wealth is \$881 million, or $\$500 \text{ million} * (1.12)^5$
 - Free cash flow is \$100 million in year 3 and zero in the other years
 - The future value of free cash flow is \$125 million, or $\$100 \text{ million} * (1.12)^2$
 - Actual shareholder wealth is \$725 million, or $\$600 \text{ million} + \125 million
- Result:
 - Excess return is $-\$156 \text{ million}$, or $\$725 \text{ million} - \881 million
- Interpretation:
 - Investors have \$156 million less wealth than they would have had if they had invested in a market portfolio of equal risk