

Shareholder Value Advisors

Estimating Investor Expectations of Long-Term Operating Performance

Panel 1 FGV for Average Company

Stock Price		25.00
Shares Outstanding (mil)		<u>x 26</u>
Market Equity Value (\$mil)		650
Debt and Other Liabilities		350
Less: Short-Term Investments & CIP		<u>0</u>
Market Enterprise Value		1,000
Capital (fiscal year end)	750	
Economic Profit	-16	
Cost of Capital (c)	8.00%	
Economic Profit/Cost of Capital (EP/c)	-200	
Current Operations Value (COV)		<u>550</u>
Future Growth Value (FGV)		450
Expected Return on COV (c * COV)		44
Expected Return on FGV (c * FGV)		36

Overview

- Expected operating performance is the annual economic profit improvement (ΔEP) required for investors to earn a competitive return on the market value of their investment (i.e., market enterprise value including both debt and equity).
- The company's enterprise value can be expressed as the sum of current operations value (COV) and future growth value (FGV). COV is the sum of capital and the perpetuity value of current EP – the value of the company without any future EP growth.
- We can show that FGV is the present value of future EP improvement, but to translate that present value into a schedule of annual ΔEP we need to work backward from the required return on FGV.
- Investors' expected return on market value has two pieces: $c * COV$ and $c * FGV$. With $\Delta EP = 0$, NOPAT equals $c * COV$ and takes care of the first piece; $c * FGV$ must come from ΔEP and ΔFGV .

Panel 2 "Market Goodwill" ΔEP for Average Company

	Current Operations Value (COV)		
Market Enterprise Value =	Capital	+	(EP/c) + Future Growth Value (FGV)
1,000	750		-200 450

Constant economic profit performance, i.e., $\Delta EP = 0$, provides a cost of capital return on current operations value, but no return on future growth value. The required return on future growth value must come from ΔEP and ΔFGV .

Analytically, this relationship can be expressed as:

$$\Delta EP_1 + \Delta EP_1/c + \Delta FGV_1 = \text{Return on FGV} = c * FGV_0$$

If $\Delta FGV_1 = 0$, then the required annual operating improvement (ΔEP_1) can be easily calculated:

$c * FGV_0$	$* c/(1+c)$	Annual Operating Improvement = ΔEP_1
36	7.41%	3

Alternative Models

- The key to determining expected performance is a model of ΔFGV .
- A common model in strategic planning is "competitive decay," i.e., that competition eliminates the opportunity for incremental returns above the cost of capital. This model implies that FGV declines to zero, but has little support empirically.
- A simple alternative model of ΔFGV is $\Delta FGV = 0$. This implies that FGV is "market goodwill," an asset that does not depreciate. With this model, we can easily calculate expected ΔEP (see Panel 2).
- Both of these models over-state expected ΔEP for the average company. Over the past 20 years, ΔFGV has been positive for the median company in every five year period (although a significant minority of companies in the last 20 years have experienced 5+ year periods of negative ΔFGV).
- The most accurate approach to estimating expected ΔEP is to develop an empirical model of ΔFGV based on historical peer company data.