### Current Cashflow to Firm

- **EBIT(1-t):** $3,110
- **Nt CpX:** $1,522
- **Chg WC:** $126
- **FCFF:** $1,462

**Reinvestment Rate:** 52.99%

**FCFF:** $1,462

### Expected Growth in EBIT (1-t)

\[
0.5299 \times 1.1218 \times 0.0645 = 6.45\%
\]

### Stable Growth

\[
g = 5\%; \quad \text{Beta} = 1.00; \\
\frac{D}{D+E} = 6.86\%; \quad \text{ROC} = 12.18\%
\]

**Reinvestment Rate:** 41.07%

### Terminal Value

\[
\text{Terminal Value}_{10} = \frac{2631}{0.0958 - 0.05} = 57418
\]

### Firm Value

\[
\text{Firm Value} = 41587 + \text{Cash:} 9244 - \text{Debt:} 5426 = 45,405
\]

**Value/Share:** $20.97

### Cost of Equity

\[
\text{Cost of Equity} = 10.85\%
\]

### Cost of Debt

\[
\text{Cost of Debt} = (6\% + 0.50\%)(1 - 0.35) = 4.23\%
\]

### Weights

\[
E = 93.14\% \quad D = 6.86\%
\]

### Riskfree Rate

\[
\text{Riskfree Rate:}
\text{Government Bond Rate} = 6\%
\]

**Beta:** 1.21

\[
\text{Risk Premium} = 4\%
\]

### Unlevered Beta for Sectors

\[
\text{Unlevered Beta for Sectors:} 1.18
\]

### Firm's D/E Ratio

\[
\text{Firm's D/E Ratio:} 7.36\%
\]

### Historical US Premium

\[
\text{Historical US Premium:} 4\%
\]

### Country Risk Premium

\[
\text{Country Risk Premium:} 0\%
\]
Figure 31.14: Motorola: A Restructured Valuation

Current Cashflow to Firm

<table>
<thead>
<tr>
<th>EBIT(1-t)</th>
<th>- Nt CpX</th>
<th>- Chg WC</th>
<th>= FCFF</th>
<th>Reinvestment Rate = 52.99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,110</td>
<td>1,522</td>
<td>126</td>
<td>1,462</td>
<td></td>
</tr>
</tbody>
</table>

EBIT(1-t) : 3,110
- Nt CpX : 1,522
- Chg WC : 126
= FCFF : 1,462
Reinvestment Rate = 52.99%

Expected Growth in EBIT (1-t)

\[ \text{Expected Growth} = 0.5299 \times 0.1722 = 0.0912 \]

9.12%

Return on Capital

17.22%

Stable Growth

g = 5%; Beta = 1.00; D/(D+E) = 10%; ROC = 12.18%

Reinvestment Rate = 41.07%

Terminal Value

\[ 2978 / (0.0947 - 0.05) = 66606 \]

Cost of Equity

10.96%

Cost of Debt

(6% + 1.25%)(1 - 0.35) = 4.71%

Weights

E = 90% D = 10%

Riskfree Rate

Government Bond Rate = 6%

+ Beta

1.24

x Risk Premium

4%

Unlevered Beta for Sectors: 1.18

Firm's D/E Ratio: 11.11%

Historical US Premium 4%

Country Risk Premium 0%

EBIT(1-t) $3,394 $3,703 $4,041 $4,410 $4,813
- Reinvestment $1,798 $1,962 $2,142 $2,337 $2,550
FCFF $1,595 $1,741 $1,900 $2,073 $2,262

Discount at Cost of Capital (WACC) = 10.96% (0.9) + 4.71% (0.1) = 10.33%

Firm Value: 47812
+ Cash: 9244
- Debt: 5426
= Equity 51630
- Options 283
Value/Share $23.86

Terminal Value 5 = 2978/(0.0947 - 0.05) =
<table>
<thead>
<tr>
<th>More control</th>
<th>Less control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Payoff quickly</strong></td>
<td><strong>Payoff in long term</strong></td>
</tr>
<tr>
<td><strong>Quick Fixes</strong></td>
<td><strong>Odds on..</strong></td>
</tr>
<tr>
<td><strong>Existing Investments</strong></td>
<td>1. Reduce net working capital requirements, by reducing inventory and accounts receivable, or by increasing accounts payable. 2. Reduce capital maintenance expenditures on assets in place. 3. Reduce marginal tax rate.</td>
</tr>
<tr>
<td>c. Eliminate operating expenses that generate no revenues and no growth.</td>
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</tr>
<tr>
<td>d. Take advantage of tax law to increase cash flow.</td>
<td>d. Take advantage of tax law to increase cash flow.</td>
</tr>
<tr>
<td><strong>Expected Growth</strong></td>
<td>Increase reinvestment rate or marginal return on capital or both in firm’s existing businesses.</td>
</tr>
<tr>
<td>Eliminate new capital expenditures that are expected to earn less than the cost of capital.</td>
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</tr>
<tr>
<td><strong>Length of High Growth Period</strong></td>
<td>Use economies of scale or cost advantages to create higher return on capital.</td>
</tr>
<tr>
<td>If any of the firm’s products or services can be patented and protected, do so.</td>
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</tr>
<tr>
<td><strong>Cost of Financing</strong></td>
<td>a. Change financing type and use innovative securities to reflect the types of assets being financed. b. Use the optimal financing mix to finance new investments. c. Make cost structure more flexible to reduce operating leverage.</td>
</tr>
<tr>
<td>a. Use swaps and derivatives to match debt more closely to firm’s assets. b. Recapitalize to move the firm towards its optimal debt ratio.</td>
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</table>