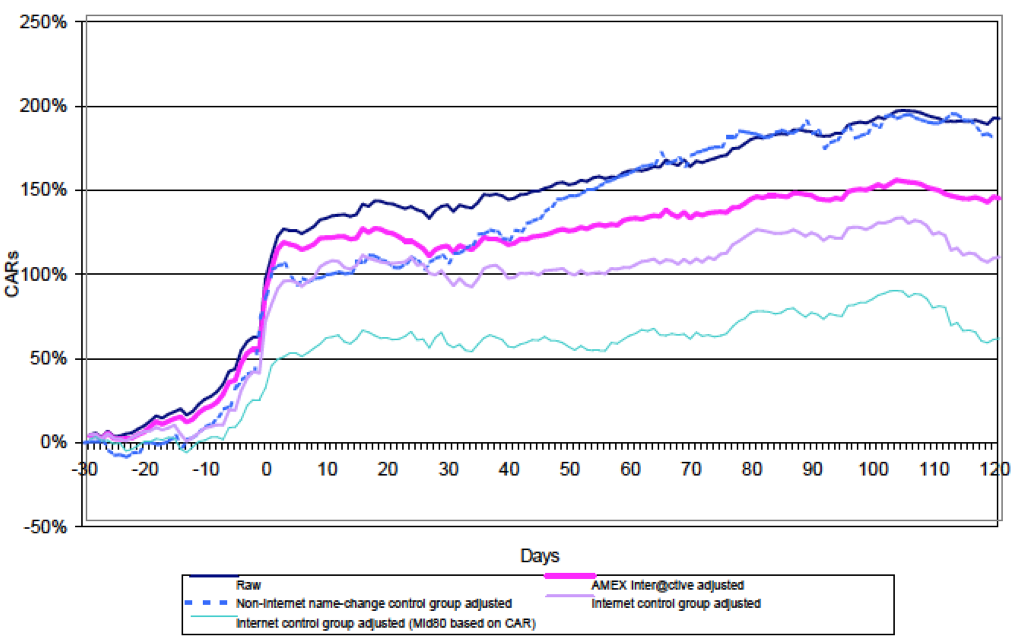
# SESSION 10: VALUE ENHANCEMENT

# Price Enhancement versus Value Enhancement



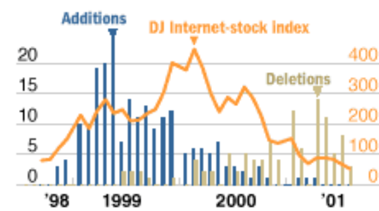
Figure 1: Cumulative abnormal returns earned around the announcement date by firms changing their names to .com names




**NAME THAT STOCK**

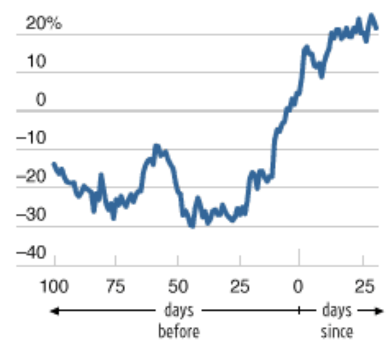
**New Markets, New Names**

In the bull market, adding dot-com to a company name made a stock soar. Lately those zippy new monikers are disappearing.




**New Name, Higher Price**

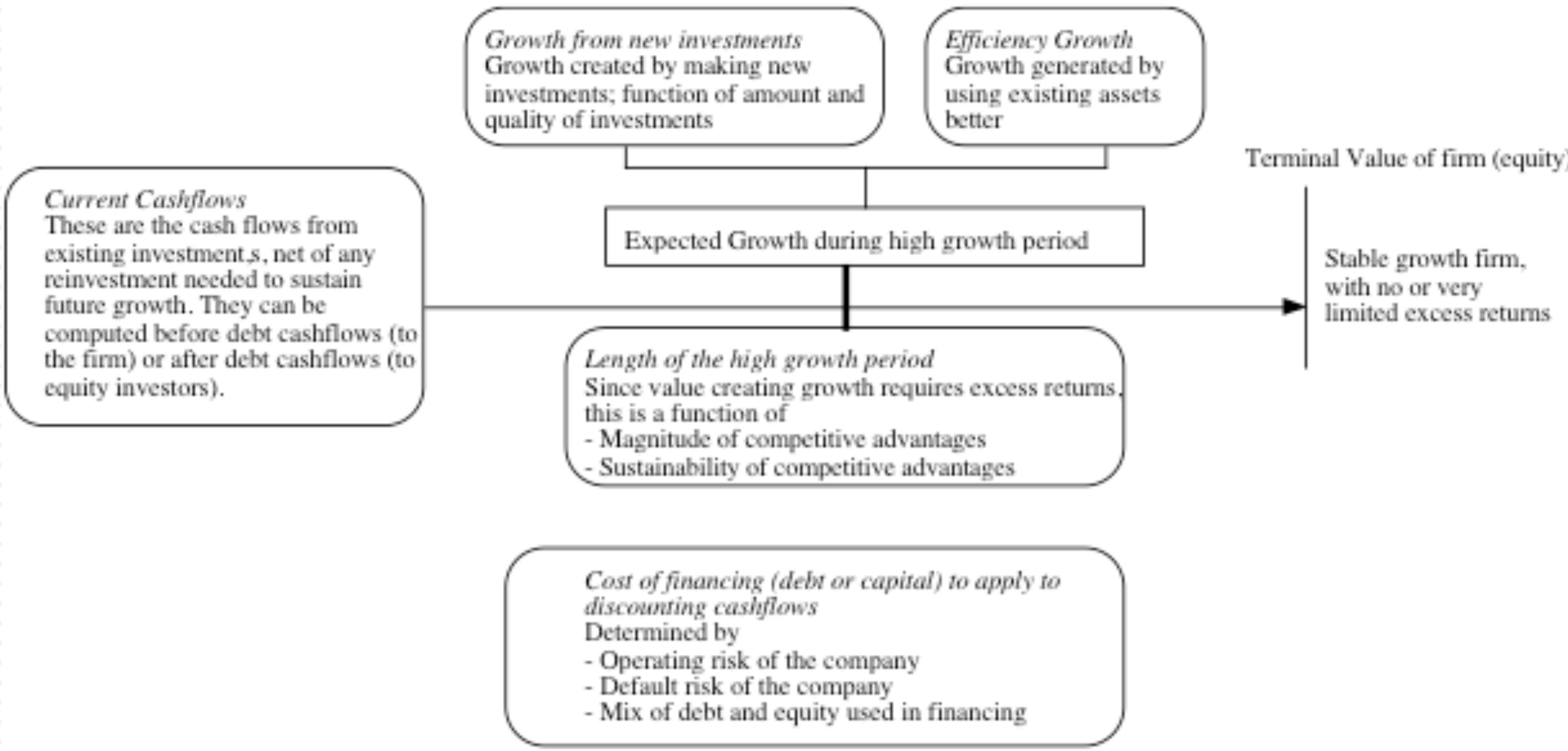
But the stocks still get a bounce when dot-com goes away. Chart shows returns in the days before and after the name change.




*Sources: Thomson Datastream; P. Raghavendra Rau, Michael J. Cooper, Igor Osobov, Purdue Univ.; Ajay Khorana, Virginia Univ.; Ajay Patel, Wake Forest Univ.*

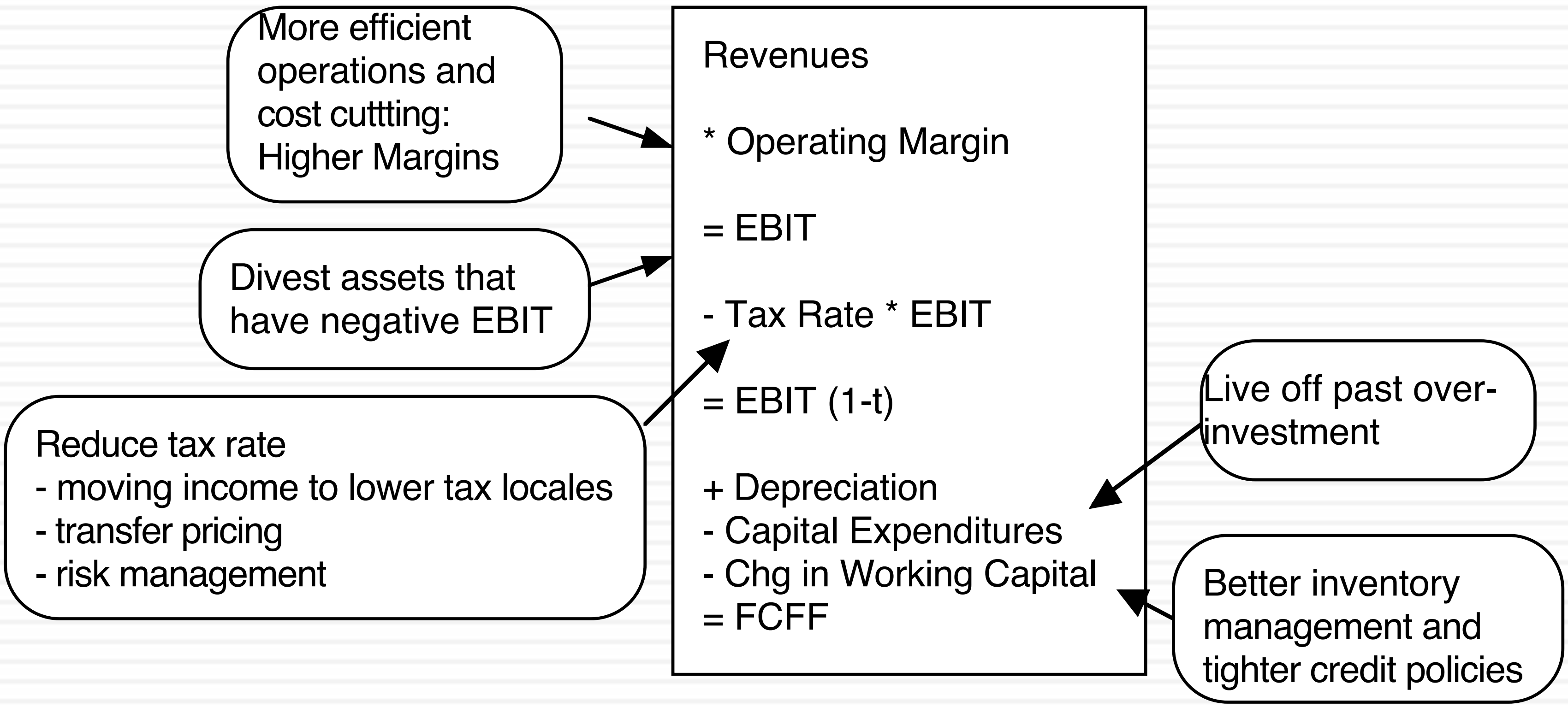
# The Paths to Value Creation.. Back to the determinants of value..





# Value Creation 1: Increase Cash Flows from Assets in Place

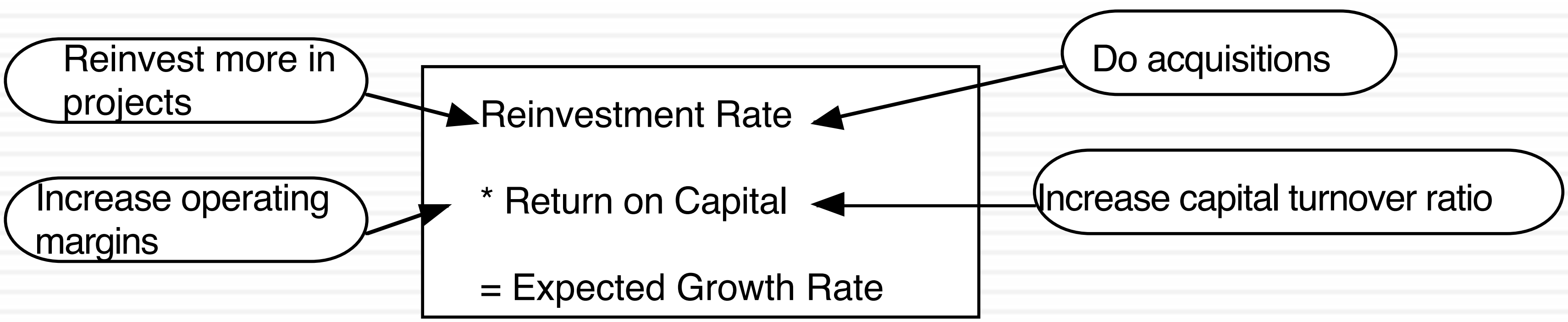




# Value Creation 2: Increase Expected Growth



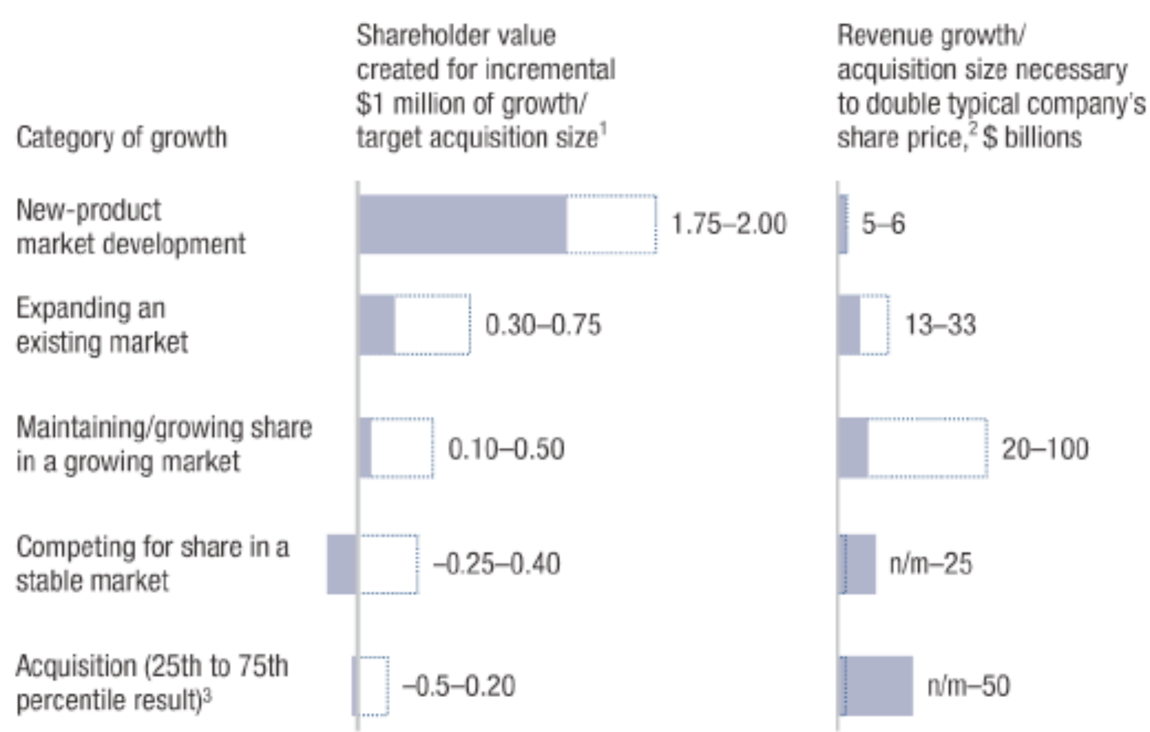
*Price Leader versus Volume Leader Strategies*
*Return on Capital = Operating Margin * Capital Turnover Ratio*



# Value Creating Growth… Evaluating the Alternatives..

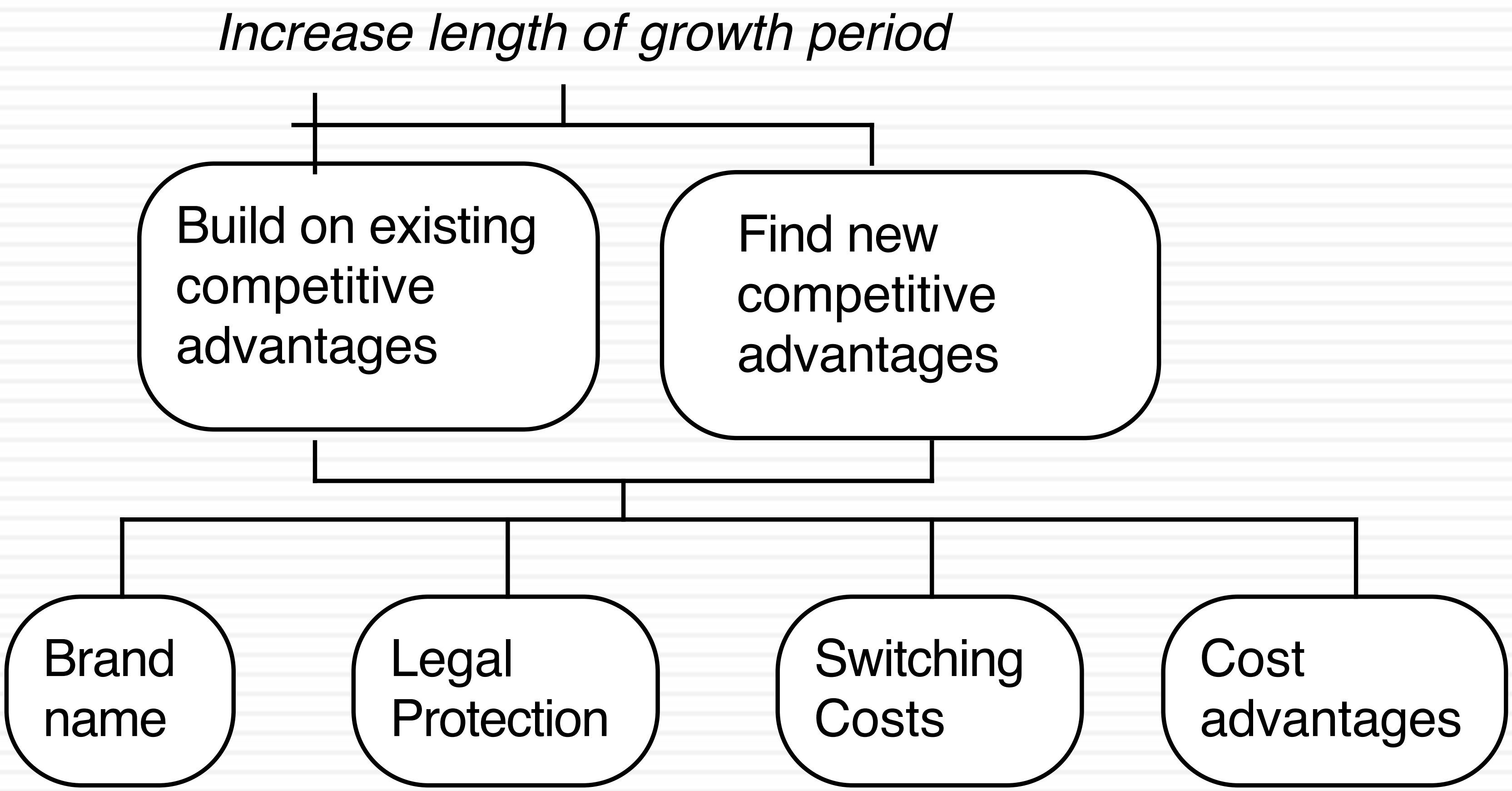


**Modes of organic growth vary in value creation intensity—consumer goods industry**



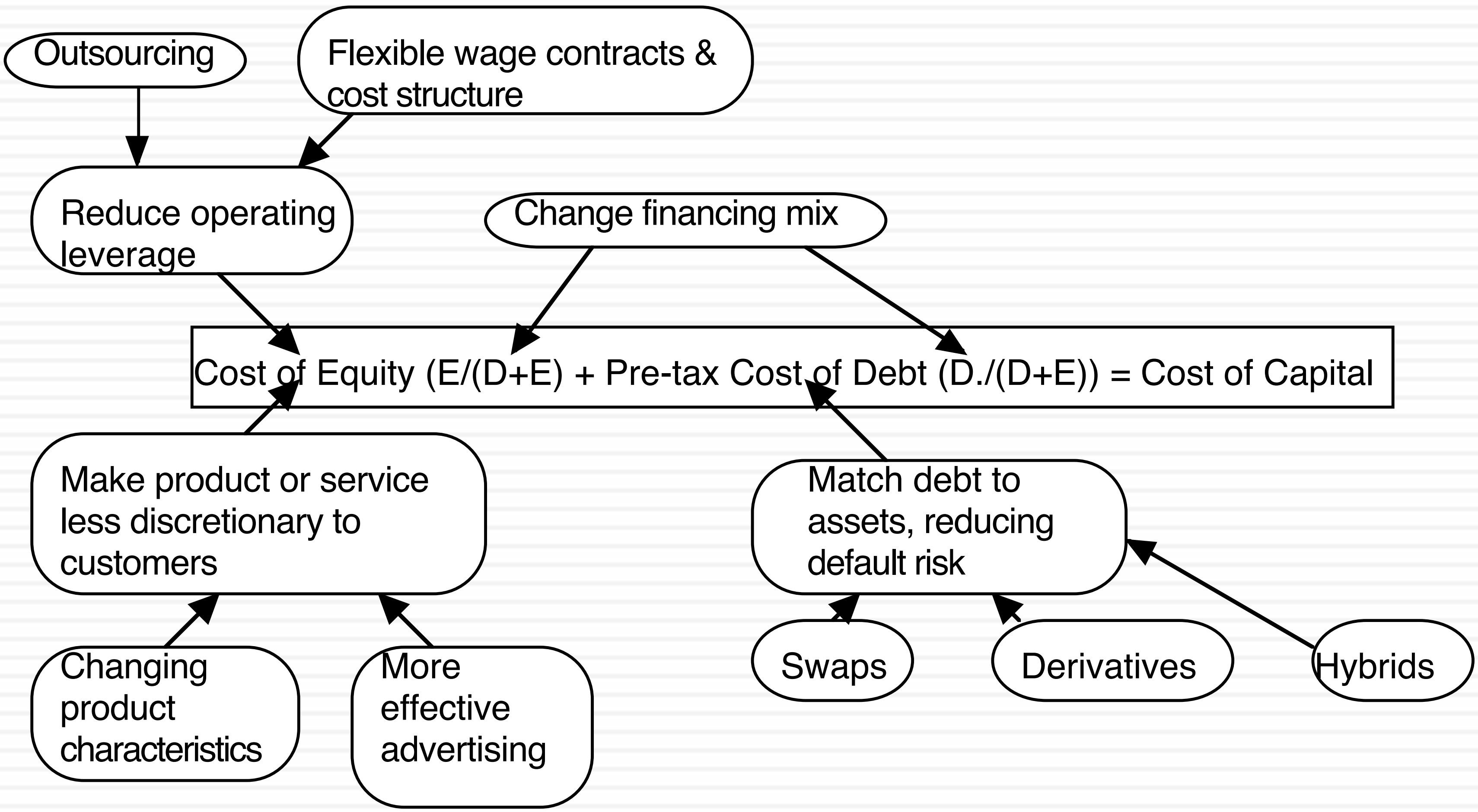
# III. Building Competitive Advantages: Increase length of the growth period





# IV. Reduce Cost of Capital





# SAP: Status Quo

Avg Reinvestment rate = 36.94%

**Current Cashflow to Firm**
EBIT(1-t) : 1414
- Nt CpX 831
- Chg WC - 19
= FCFF 602
Reinvestment Rate = 812/1414
=57.42%

Reinvestment Rate
57.42%

**Expected Growth in EBIT (1-t)**
.5742*.1993=.1144
**11.44%**

Return on Capital
19.93%

Stable Growth
g = 3.41%; Beta = 1.00;
Debt Ratio= 20%
Cost of capital = 6.62%
ROC= 6.62%; Tax rate=35%
Reinvestment Rate=51.54%

Terminal Value$_{10}$= 1717/(.0662-.0341) = 53546

First 5 years

Growth decreases gradually to 3.41%

Op. Assets 31,615
+ Cash: 3,018
- Debt 558
- Pension Lian 305
- Minor. Int. 55
=Equity 34,656
-Options 180
Value/Share106.12

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| EBIT | 2,483 | 2,767 | 3,083 | 3,436 | 3,829 | 4,206 | 4,552 | 4,854 | 5,097 | 5,271 |
| EBIT(1-t) | 1,576 | 1,756 | 1,957 | 2,181 | 2,430 | 2,669 | 2,889 | 3,080 | 3,235 | 3,345 |
| - Reinvestm | 905 | 1,008 | 1,124 | 1,252 | 1,395 | 1,501 | 1,591 | 1,660 | 1,705 | 1,724 |
| = FCFF | 671 | 748 | 833 | 929 | 1,035 | 1,168 | 1,298 | 1,420 | 1,530 | 1,621 |

Term Yr
5451
3543
1826
1717

Cost of Capital (WACC) = 8.77% (0.986) + 2.39% (0.014) = 8.68%

Debt ratio increases to 20%
Beta decreases to 1.00

On May 5, 2005, SAP was trading at 122 Euros/share

**Cost of Equity**
**8.77%**

**Cost of Debt**
(3.41%+..35%)(1-.3654)
= 2.39%

**Weights**
E = 98.6% D = 1.4%

**Riskfree Rate**:
Euro riskfree rate = 3.41%

\+

**Beta**
1.26

X

**Risk Premium**
4.25%

Unlevered Beta for Sectors: 1.25

Mature risk premium
4%

Country Equity Prem
0.25%

# SAP : Optimal Capital Structure

| Debt Ratio | Beta | Cost of Equity | Bond Rating | Interest rate on debt | Tax Rate | Cost of Debt (after-tax) | WACC | Firm Value (G) |
|---|---|---|---|---|---|---|---|---|
| 0% | 1.25 | 8.72% | AAA | 3.76% | 36.54% | 2.39% | 8.72% | $39,088 |
| 10% | 1.34 | 9.09% | AAA | 3.76% | 36.54% | 2.39% | 8.42% | $41,480 |
| 20% | 1.45 | 9.56% | A | 4.26% | 36.54% | 2.70% | 8.19% | $43,567 |
| 30% | 1.59 | 10.16% | A- | 4.41% | 36.54% | 2.80% | 7.95% | $45,900 |
| 40% | 1.78 | 10.96% | CCC | 11.41% | 36.54% | 7.24% | 9.47% | $34,043 |
| 50% | 2.22 | 12.85% | C | 15.41% | 22.08% | 12.01% | 12.43% | $22,444 |
| 60% | 2.78 | 15.21% | C | 15.41% | 18.40% | 12.58% | 13.63% | $19,650 |
| 70% | 3.70 | 19.15% | C | 15.41% | 15.77% | 12.98% | 14.83% | $17,444 |
| 80% | 5.55 | 27.01% | C | 15.41% | 13.80% | 13.28% | 16.03% | $15,658 |
| 90% | 11.11 | 50.62% | C | 15.41% | 12.26% | 13.52% | 17.23% | $14,181 |

# SAP: Restructured

Avg Reinvestment rate = 36.94%

**Current Cashflow to Firm**
EBIT(1-t) : 1414
- Nt CpX 831
- Chg WC - 19
= FCFF 602
Reinvestment Rate = 812/1414 =57.42%

Reinvestment Rate 70%

Reinvest more in emerging markets

**Expected Growth in EBIT (1-t)**
.70*.1993=.1144
**13.99%**

Return on Capital 19.93%

Stable Growth
g = 3.41%; Beta = 1.00;
Debt Ratio= 30%
Cost of capital = 6.27%
ROC= 6.27%; Tax rate=35%
Reinvestment Rate=54.38%

Terminal Value$_{10}$= 1898/(.0627-.0341) = 66367

First 5 years

Growth decreases gradually to 3.41%

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Term Yr |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EBIT | 2,543 | 2,898 | 3,304 | 3,766 | 4,293 | 4,802 | 5,271 | 5,673 | 5,987 | 6,191 | 6402 |
| EBIT(1-t) | 1,614 | 1,839 | 2,097 | 2,390 | 2,724 | 3,047 | 3,345 | 3,600 | 3,799 | 3,929 | 4161 |
| - Reinvest | 1,130 | 1,288 | 1,468 | 1,673 | 1,907 | 2,011 | 2,074 | 2,089 | 2,052 | 1,965 | 2263 |
| = FCFF | 484 | 552 | 629 | 717 | 817 | 1,036 | 1,271 | 1,512 | 1,747 | 1,963 | 1898 |

Op. Assets 38045
+ Cash: 3,018
- Debt 558
- Pension Lian 305
- Minor. Int. 55
=Equity 40157
-Options 180
Value/Share 126.51

Cost of Capital (WACC) = 10.57% (0.70) + 2.80% (0.30) = 8.24%

**Cost of Equity**
**10.57%**

**Cost of Debt**
(3.41%+1.00%)(1-.3654)
= 2.80%

**Weights**
E = 70% D = 30%

On May 5, 2005, SAP was trading at 122 Euros/share

Use more debt financing.

**Riskfree Rate**:
Euro riskfree rate = 3.41%

+

**Beta**
1.59

X

**Risk Premium**
4.50%

Unlevered Beta for Sectors: 1.25

Mature risk premium 4%

Country Equity Prem 0.5%