Investing in Growth Stocks

A Modern Value Investing Perspective

Value Investing Principles

- Identify enterprises whose value as a business is reliably calculable by you (circle of competence)

- Among those enterprises, invest in those whose market price (equity plus debt) is below your calculated value by an appropriate margin of safety (1/3 to 1/2)

Value Investing Process

SEARCH

- Cheap
- Ugly
- Obscure
- Otherwise Ignored

VALUATION

- Assets
- Earnings Power
- Franchise

REVIEW

- Key Issues
- Collateral Evidence
- Personal Biases

RISK MANAGEMENT

- Margin of Safety
- Some Diversification
- Patience – Default Strategy

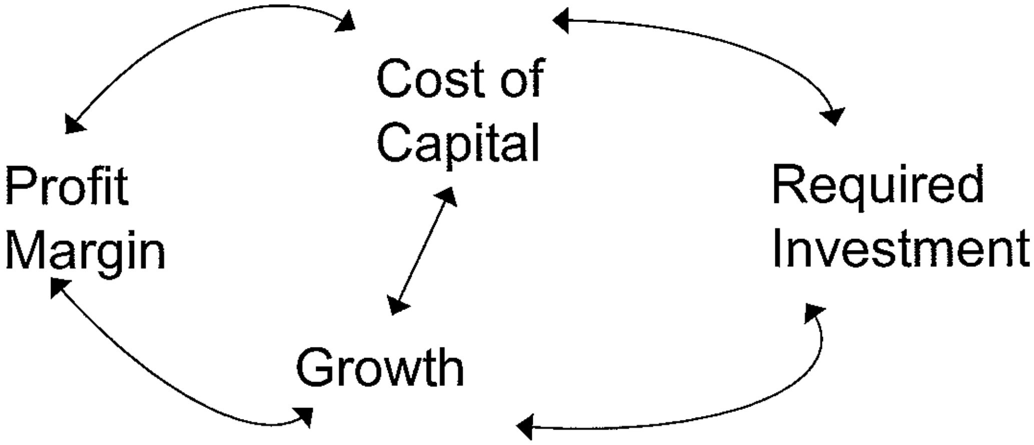
Shortcomings of NPV Approach in Practice

(1) Method of Combining Information

$$NPV = CF_o + CF_1 \underbrace{\left(\frac{1}{1+R}\right)}_{\text{Good Information (Precise)}} + \ldots + CF_{20} \underbrace{\left(\frac{1}{1+R}\right)^{20}}_{\text{Bad Information (Imprecise)}} + \ldots$$

= Bad/Imprecise Information

(2) Sensitivity Analysis is Based on Difficult-to-Forecast Parameters which co-vary in fairly complicated ways



Cost of Capital

Profit Margin

Required Investment

Growth

Valuation Assumptions

Traditional:

- Profit rate 6%
- Cost of capital 10%
- Investment/sales 60%
- Profit rate +3% (i.e. 9%)
- Growth rate 7% of sales, profits

Strategic:

- Industry is economically viable
- Entry is “Free” (no incumbent competitive advantage)
- Firm enjoys sustainable competitive advantage
- Competitive advantage is stable, firm grows with industry

Value Investing

Basic Approach to Valuation

"Know what you know"; Circle of competence

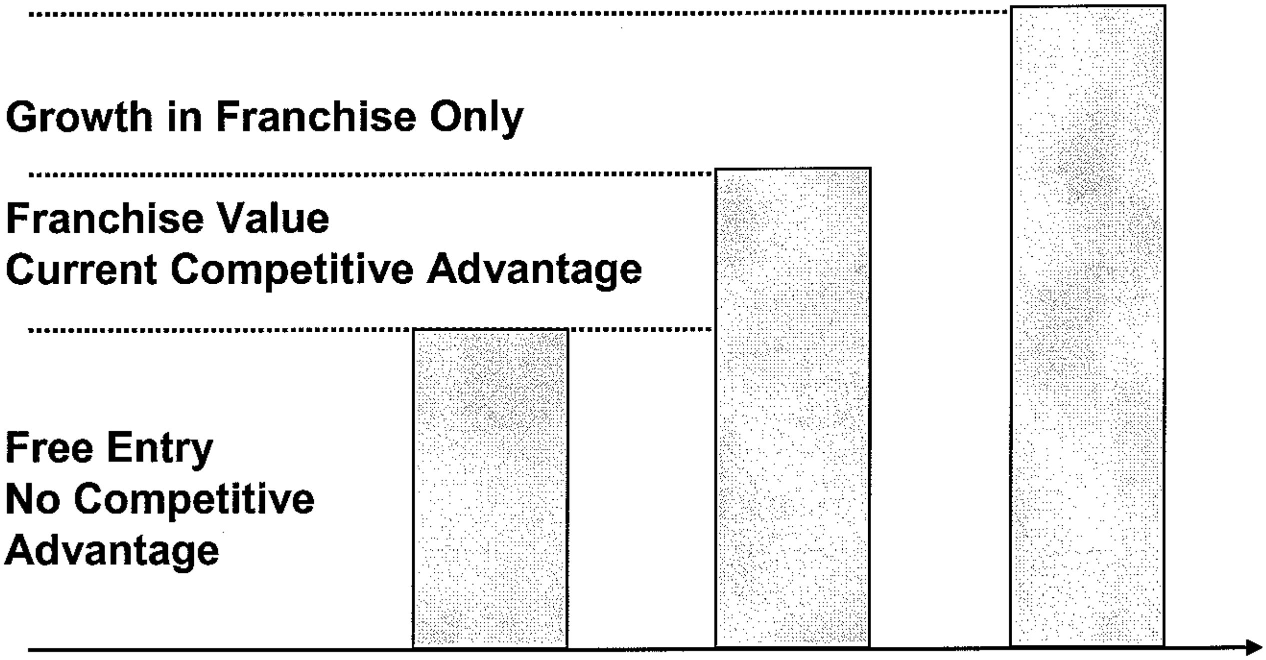
1. Organize valuation components by reliability

   Most Reliable → *Least Reliable*

2. Organize valuation components by underlying strategic assumption

   No Competitive Advantage → *Growing Competitive Advantage*

Basic Elements of Value



Strategic Dimension

Growth in Franchise Only

Franchise Value
Current Competitive Advantage

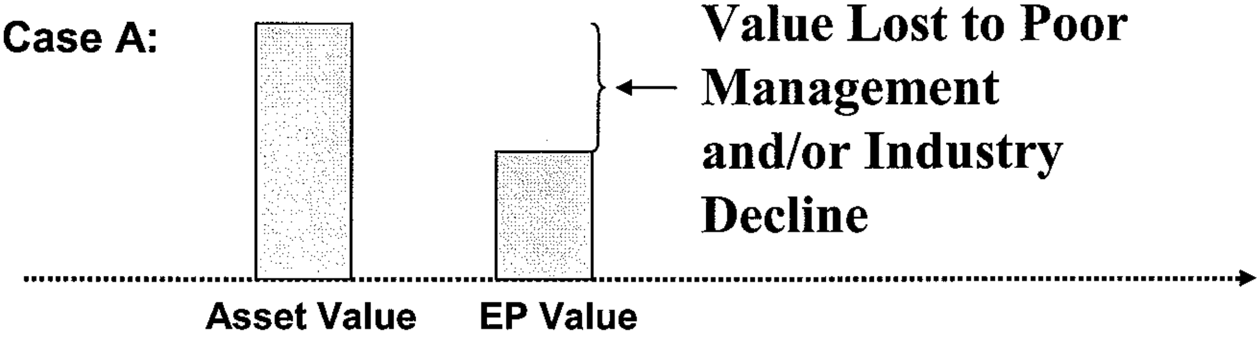
Free Entry
No Competitive Advantage

Reliability Dimension

Asset Value	**Earnings Power Value**	**Total Value**
• Tangible • Balance Sheet Based • No Extrapolation	• Current Earnings • Extrapolation • No Forecast	• Includes Growth • Extrapolation • Forecast

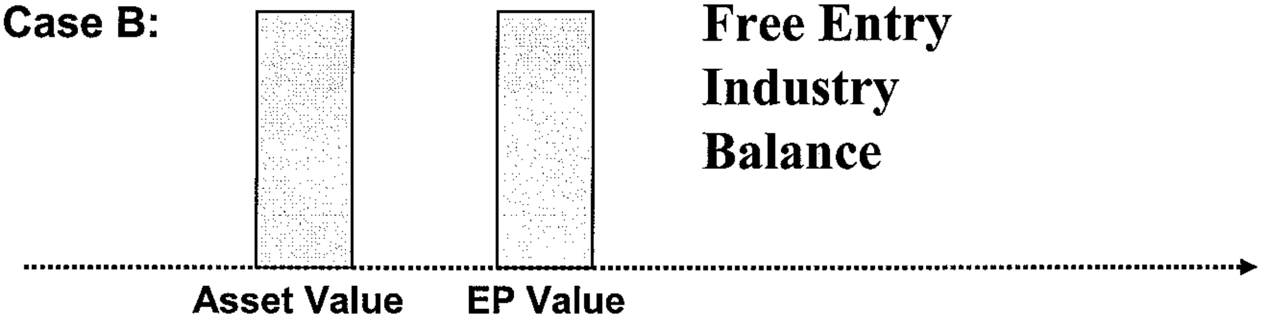
Earning Power and Entry - Exit

Case A:



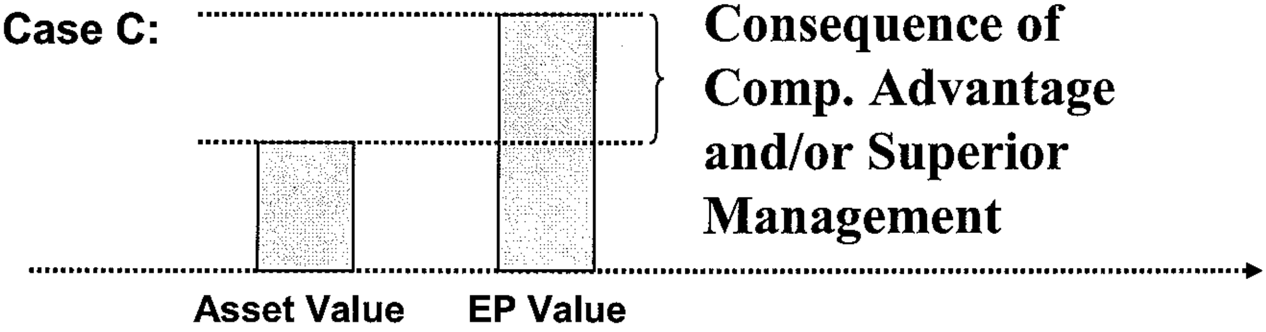
Value Lost to Poor Management and/or Industry Decline

Case B:



Free Entry Industry Balance

Case C:



Consequence of Comp. Advantage and/or Superior Management

"Sustainability" depends on Continuing Barriers-to-Entry

Total Value Including Growth

- Least reliable - Forecast change not just stability (Earnings Power)
- Highly sensitive to assumptions
- Data indicates that investors systematically overpay for growth
- Strict value investors want growth for “Free” (Market Value < Earnings Power Value)

Value of Growth - Basic Algebra

$$\text{“Earnings”} = \underset{\text{(ROC)}}{\text{Return on Capital}} \; * \; \text{Capital}_{\text{Beg Yr}}$$

Necessary Investment to Support Growth at G% PA

$$= G \; * \; \text{Capital}_{\text{Beg Yr}}$$

Cash Flow of Growing Firm = “Earnings” – Necessary Investment

$$(CF_0) = \text{ROC} \; * \; \text{Capital}_{\text{Beg Yr}} - G \; * \; \text{Capital}_{\text{Beg Yr}}$$

$$= (\text{ROC} - G) \; * \; \text{Capital}_{\text{Beg Yr}}$$

$$\text{Value of Growing Firm} = CF_0 \; * \; \frac{1}{R\text{-}G} = \frac{(\text{ROC} - G) * \text{Capital}_{\text{Beg Yr}}}{R\text{-}G}$$

$$= \left[\frac{(\text{ROC} - G)}{R - G}\right] \text{Capital}_{\text{Beg Yr}}$$

WACC

Critical Valuation Factor is $\dfrac{\text{ROC} - G}{R - G}$

Value of Growth
Quantitative Effects

Investment: • $100 million

Cost of Funds: • 10% (R) = $10M

Return on Investment (%)	5%	10%	20%
Return on Investment ($)	$5M	$10M	$20M
Cost of Investment	$10M	$10M	$10M
Net Income Created	($5M)	0	$10M
Net Value Created	($50M)	0	$100M
Qualitative Impact:	Value Destroyed	No Value	Value Created
Situation:	Competitive Disadvantage	Level Playing Field	Competitive Advantage

Valuing Growth Basics

- Growth at a competitive disadvantage destroys value (AT&T in info processing)
- Growth on a level playing field neither creates nor destroys value
  (Wal-Mart in NE)
- Only franchise growth (at industry rate) creates value

Varieties of Competitive Advantage

Producer (Cost) Supply – Proprietary Technology or Resources

Consumer (Revenue) Demand – Customer Captivity

Economies-of-Scale (plus Customer Captivity)

⇓

Key to Sustainability

Sustainable Competitive Advantage implies market dominance.

Competitive Advantage Strategy Implications

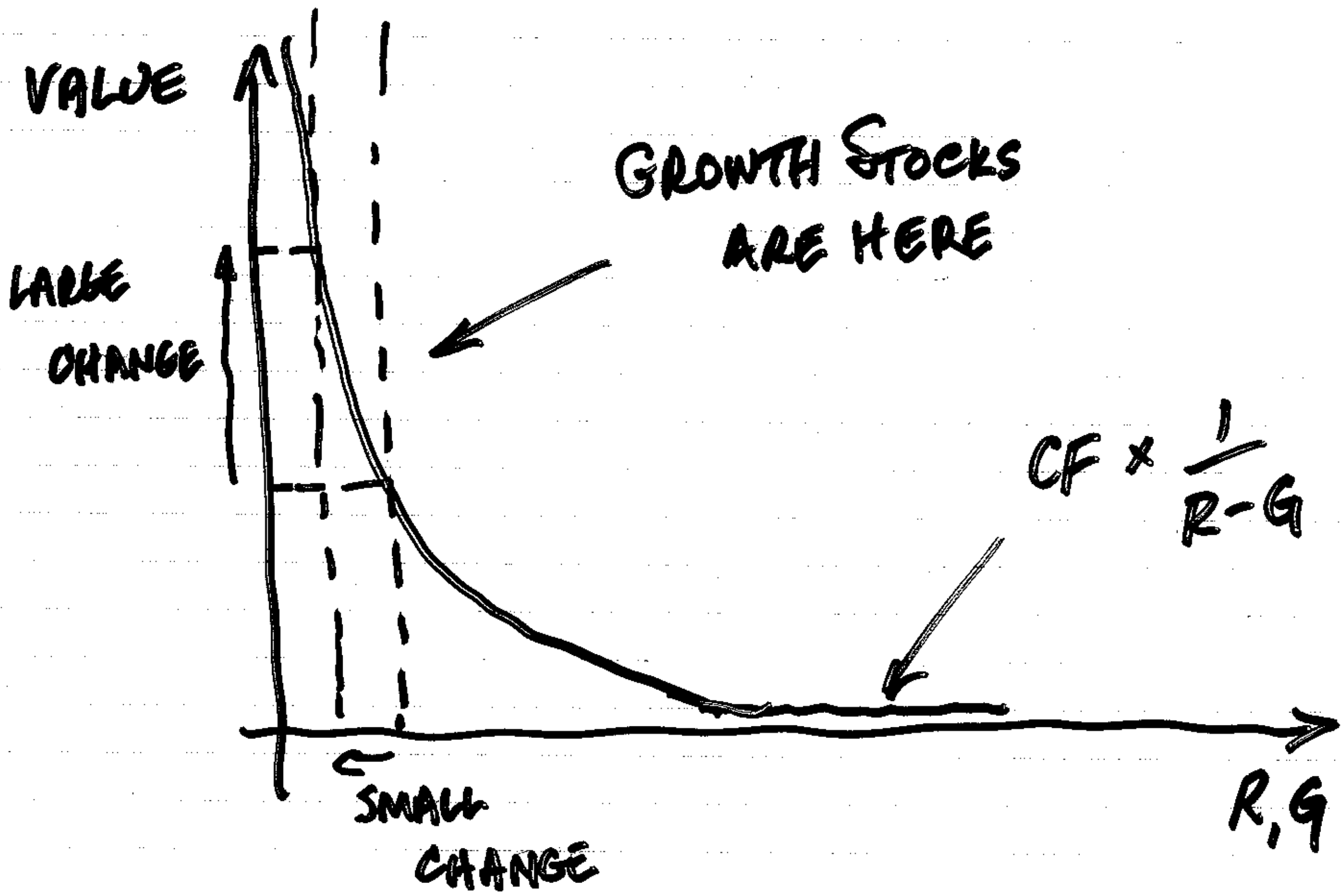
- Analysis on a market-by-market basis

- Large global markets are difficult to dominate

- Local markets (Physical, product geography) are ones susceptible to domination
  - Microsoft (Apple, IBM)
  - Wal-Mart (Kmart, Circuit City)
  - Intel (Texas Instruments, et al)
  - Verizon (ATT, Sprint)
  - Pharmaceuticals

EVALUATING GROWTH

THE FUNDAMENTAL PROBLEM



R = 10%, G = 5% MULTIPLE = $\frac{1}{10-5} = \frac{1}{5} = 20X$

R = 11%, G = 4% MULTIPLE = $\frac{1}{11-4} = \frac{1}{7} = 14X$

R = 9%, G = 6% MULTIPLE = $\frac{1}{9-6} = \frac{1}{3} = 33X$

SOLUTION: <u>LOOK AT RETURNS</u>

Procedure in Practice

(1) Verify existence of franchise

  i. History – Returns – Share Stability
  ii. Sustainable competitive advantages

(2) Calculate earnings return – i.e. 1/PE

(3) Identify cash distribution portion of earnings return

(Dividend + Repurchase)

(4) Identify organic (low investment) growth

(GDP±)

(5) Identify reinvestment return

(Multiple of Pct retained Earnings)

(6) Compare to market return (D/P & growth)

(7) Identify options positive/negative

MARKET RETURN

MARKET MULTIPLE (SUSTAINABLE) = 15X

RETURN = $\frac{1}{15} \cong 6\frac{1}{2}\%$ (FROM EARNINGS)

INFLATION VALUE $\cong 2\%$

TOTAL $\cong \underline{\underline{8\frac{1}{2}\%}}$

DIVIDENDS + REPURCHASES $\cong 2\frac{1}{2}\% - 3\%$

CAPITAL GAINS = PROFIT GROWTH = GDP GROWTH

$\cong 5\%$

TOTAL RETURN $\cong \underline{\underline{7\frac{1}{2}\% - 8\%}}$

MKT RETURN $\cong \underline{\underline{8\%}}$.

Simple Examples Franchise Verification

Company	Business	Adjusted ROE
Wal-Mart	Discount Retail	22.5%
American Express	High-end Credit Cards & Services	45.50%
Gannett	Local Newspapers & Broadcasting	15.6%
Dell	Direct PC Supply to Large organizations	100.0% +

Simple Examples Franchise Verification

Sources of Competitive Advantage

	Sources of Competitive Advantage	
Company	**Customer Captivity?**	**Economies-of-Scale?**
Wal-Mart	Slight Customer Captivity	Local Economies-of-Scale
American Express	Customer Captivity	Some Economies-of-Scale
Gannett	Customer Captivity	Local Economies-of-Scale
Dell	Slight Customer Captivity	Economies-of-Scale

GANNETT

MULTIPLE = 8X $\Longrightarrow \frac{1}{8}$ = $12\frac{1}{2}\%$ RETURN

DISTRIBUTION = [redacted] 80% = 10% CASH RETURN

ORGANIC GROWTH = -5% = -5%

REINVESTMENT : = 2%

AMOUNT $2\frac{1}{2}\%$

$$\left.\begin{array}{ll}\text{RETURN} & 8\% \\ \text{COST OF CAPITAL} & 10\%\end{array}\right\} .8$$

VALUE 2%

TOTAL RETURN = 7%

WALMART

[redacted] MULTIPLE = 17X ⇒ RETURN = 6%

DISTRIBUTION ≅ 2%

ORGANIC GROWTH = GDP - INCOME GROUP - GOODS
(SAME STORE SALES)

= 4½% - 1½% - 1%

= 2%

REINVESTMENT : AMOUNT 4%

DOMESTIC ≅ 15%

OVERSEAS ≅ 5%

AVERAGE ≅ 10% ≅ COST OF CAPITAL

VALUE = 4%

TOTAL RETURN = 8% = MKT RETURN.

AMERICAN EXPRESS

MULTIPLE = 13X ⇒ 7½% RETURN

DISTRIBUTION = 2/3 ⇒ 5% CASH RETURN

ORGANIC GROWTH = GDP + INCOME GROUP + SERVICES
(NETWORK BILLINGS/CARDHOLDER SPEND)
= 4½% + 2% + ½% = 7%

REINVESTMENT: AMOUNT: 2½%

CUSTOMER LOANS - MARGIN 9½% (14 - 4½)
LOSS RATE 5½% (AVERAGE)
RETURN 4%/LOAN
LEVERAGE 8X
~~NET~~ RETURN 32%/EQUITY
AFTER TAX 20% (2X COST CAPITAL)

VALUE = 5% TOTAL RETURN = 17%