Value Creation

Campbell R. Harvey
Duke University and NBER
Value Creation
Introduction

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Value Creation
Acknowledgment

This material is meant to be pedagogical rather than representing original research on my part. Material is freely drawn from:


Michael Bradley, *Corporate Restructuring and Shareholder Value*, Unpublished Lecture Notes, LAW 635, University of Michigan.
Value Creation
1. Introduction

The big picture:

(1) How does a CEO view value?

(2) How does a CEO make major investment decisions?

(3) What is your role?

(4) The issues are tough.

Value Creation
2. Long-Term Perspective

Will pursue a point of view based on the long-term.

Equity is a long-term investment. It is valued by looking at long-horizon cash flows. It is not necessarily influenced by short-term events.

CEO must maximize value to shareholders -- or tenure will be short.
## Value Creation
### 2. Long-Term Perspective

**Example: Seagram and MCA**

- Seagram agrees to pay $5.7 billion for 80% of MCA.
- Will finance purchase by selling stake in DuPont.

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**Example: Seagram and MCA**

Edgar Bronfman, Jr.

"...Seagram is paying under 15 times earnings before interest, taxes, depreciation and amortization... We could have gone into the open market and bought stock in another company at a full price or premium... We had a chance to buy MCA. It is one of the six seats at the table."

*New York Times April 4, 1995*
### Value Creation
#### 2. Long-Term Perspective

**Example:** Seagram and MCA

One theme of the day is that valuation based on P/E multiples can be problematic and misleading.

From Bronfman's remarks, Seagram's valued MCA on the basis of P/E ratios and comparables.

This method can destroy shareholder value.

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### Value Creation
#### 2. Long-Term Perspective

**Example:** Seagram and MCA

Market assessment:

- Not clear what Seagram brings to this business. Price too high given lack of synergy.

- Dumping successful investment in DuPont at too low of a price is also a problem.
Value Creation
2. Long-Term Perspective

Seagram's Price Performance

Seagram's Cumulative Returns
**Value Creation**

2. Long-Term Perspective

<table>
<thead>
<tr>
<th>Example: Seagram and MCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>372,441,666 Seagram shares outstanding.</td>
</tr>
<tr>
<td>Stock price on March 30, 1995 = $32.25</td>
</tr>
<tr>
<td>Stock price on April 28, 1995 = $27.13</td>
</tr>
<tr>
<td>→ Value destroyed = $1.906 billion</td>
</tr>
</tbody>
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Value Creation

Part I: International Perspective

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Value Creation - I

1. Roadmap

Important to understand differences in ownership and control across major industrial countries.

I will argue that maximizing shareholder value is the best strategy.

In contrast to the United States, some other countries have different objectives.

What are the implications?
1. Roadmap

- Contrast ownership and control
- Value & economic performance
- Why maximizing shareholder value is optimal
- The managerial challenge

Value Creation - I
2. Ownership and Control

We often hear from European and Asian managers that they do not and should not maximize shareholder value.

Greater weight is placed on value of other claims --especially labor.
### Value Creation - I
#### 2. Ownership and Control

**Reasons:**

- composition of ownership and control

- different roles and responsibilities that the corporations play in society.

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#### Example: Employees have different roles

**GERMANY:**

- Employees have 50% of seats on supervisory board
- Employees have decision-sharing power in personnel and social matters
Value Creation - 1
2. Ownership and Control

NETHERLANDS:

- Workers Council has a right to information and consultation, and the right to grant or withhold approval on certain decisions.
- Veto on appointment of directors

BELGIUM:

- CEO must provide Workers Council with detailed data
- Workers Council gives opinions and suggestions in some areas

DENMARK:

- Employees have statutory right to co-determination.
| Value Creation - I  
<table>
<thead>
<tr>
<th>2. Ownership and Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FRANCE:</strong></td>
</tr>
<tr>
<td>- Two employee representatives may attend board meeting but do not have voting rights</td>
</tr>
<tr>
<td>- Trade union and workers council have right to be consulted about certain activities but have no veto right</td>
</tr>
</tbody>
</table>

| Value Creation - I  
<table>
<thead>
<tr>
<th>2. Ownership and Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of capital sharply contrast with U.S.</td>
</tr>
<tr>
<td><strong>GERMANY:</strong></td>
</tr>
<tr>
<td>- Debt is dominated by institutional, not market sources.</td>
</tr>
<tr>
<td>- Debt provides 85% of external capital</td>
</tr>
<tr>
<td>- Debt privately placed with banks</td>
</tr>
<tr>
<td>- No use of short term financing</td>
</tr>
<tr>
<td>- Publicly traded corporate bonds less than 1% of total</td>
</tr>
</tbody>
</table>
Value Creation - I
2. Ownership and Control

Voting Power of German Banks

- Shares owned by banks: 91.8%
- Voting rights of banks: 50.0%
- 8.2%

Value Creation - I
2. Ownership and Control

JAPAN:

- Debt is dominated by institutional, not market sources.
- Publicly traded bonds 2.8% of external capital
- Equity issues only 8.9%
- Major security holders have shares to maintain business relations and do very little trading
- Institutions have over 60% of shares but account for only 10% of trades.
- Most institutional shareholding is within the Keiretsu.
Value Creation - I
2. Ownership and Control

Consequences:

Demand for publicly available information is less when capital is closely held. This implies that capital markets are less efficient and capital is less likely to flow quickly to more productive uses.
Consequences:

Managers less likely to focus on value creation (a long-term performance metric) because market prices are less likely to reflect good information.

Hence, the market price of equity is commonly disregarded as the best indicator of management performance.

Consequences:

Strong market for corporate control only in the U.S.

Interlocking ownerships in Germany and Japan prevents hostile takeovers. These facts affect management's focus on value creation.
Market Value Added (MVA)

Change in MVA is measure of value creation.

Defined as the change in the market value of capital (debt plus equity) minus the change in the book value of invested capital.

Note. Since book value of debt is embedded in both the market value of the total capital as well as the book value of invested capital (debt is source of funds), the change in MVA is the change in the difference between market and book value of equity over a given time period.
Value Creation - I
3. Market Value Added

Evidence suggests that U.S. firms have added more value than major industrial competitors over the past 10 years.

This is consistent with the U.S. market for corporate control.

Value Creation - I
3. Market Value Added


[Bar chart showing MVA top 10% vs. MVA bottom 10% for U.S., Japan, and Germany.]

Source: McKinsey
Value Creation - I
3. Market Value Added

McKinsey study suggests:

- Labor productivity positively correlated with change in MVA.
- Increases not achieved at the expense of labor.
- Positive change in MVA associated with larger market share. Hence, labor and other sources of capital benefit.

Value Creation - I
3. Market Value Added

Reason to believe:

- Change in MVA linked to GDP per capita.
- Companies that cannot match productivity increases of rivals will lose market share.
- Countries that cannot match the productivity of competitors will suffer a flight of capital, emigration of skilled workers and standard of living declines.
Value Creation - I
3. Market Value Added

Why maximize shareholder value?

- Best performance metric available
- Maximizing shareholder value maximizes all stakeholders' values
- Companies that fail to maximize will find that capital will flow to their competitors.

Value (discounted cash flows) is only performance measure which requires complete information.

One must use long-term perspective.

Earnings per share or return on equity can be myopic measures.
### Value Creation - 1

3. Market Value Added

**Alternative measures:**

Earnings focuses on managing income statement and places low weight on the actual amount and timing of cash flows.

Even measures like return on invested capital minus cost of capital can be a bad measure because it encourages underinvestment.

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### Value Creation - 1

3. Market Value Added

**The Stakeholders:**

- Consumers
- Labor
- Suppliers
- Debt
- Government
- Equity Shareholders

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</table>
Value Creation - I
4. Why Focus on Value?

Apparent Competing Interests

Value-based decision making dominant choice.

Example--
→ Regulatory body holding down energy prices in short-run (and raising them later) can decrease the present value of the consumer's surplus.

Example--
→ Labor union that successful in winning abnormally high wages and benefits in the short run may actually decrease the value of labor's claim if the company loses market share (or goes out of business).

→ A company which pays below market wages in the short run will lose productive laborers and end up worse off in the long run.
Value Creation - I
4. Why Focus on Value?

Example--
- A company that milks the market with high product prices in the short-term may destroy shareholder value in the long term if high prices accelerate the entry of strong new competitors.

Value Creation - I
4. Why Focus on Value?

Equity holders are the residual claimants of the company's cash flows.

They need to understand all revenues and payments to all other stakeholders. They take the greatest risk -- but they are the only ones that take all stakeholder's claims into account in making decisions that benefit themselves.
### Value Creation - 1

4. Why Focus on Value?

**Example**
- If consumers were put in control of the company, they might undertake actions just to benefit their claim (at the expense of other claimants).

- If labor were given control, they might raise their wages would benefit their claim at the expense of other claimants.

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**Value Creation - 1**

4. Why Focus on Value?

Equity holders have the strongest incentive to manage effectively and win over the long-run in competition with other companies.

All claimants benefit when shareholders use complete information and maximize the value of their own claim.

Shareholders maximize the value of other claims in order to maximize their own value.
Value Creation - I
4. Why Focus on Value?

Irrespective of any philosophical differences on the relative merits of each stakeholder's claims, "money talks".

If suppliers of capital do not receive a fair return to compensate them for risk, then they will move their capital.

Maximizing shareholder value is the law.

Some states have adopted "nonstockholder constituency statutes".

These statutes recognize that there are other stakeholders in the firm.
Minnesota statute allows a firm

"in considering the best interests of the corporation, to consider the interests of the corporation's employees, customers, suppliers, and creditors, the economy of the states and the nation, community and societal considerations."


Minnesota statute states that the firm's directors may consider other stakeholders' interests only as long as they are in the best interest of the corporation (stockholders).

Legal experts agree that this statute does not add anything new to the belief that the firm should be run in the best interests of the stockholders.
Courts have generally recognized that stockholders are the residual risk bearers and that their welfare maximization is the main responsibility of the firm.

Although stockholders have the right to sue a company when it fails to consider their best interests, other stakeholders find it much more difficult.

In an international context, if a fair return is not obtained:

- Capital will be moved across borders in search of better returns.
- If law prevents capital flows, investors will consume more and invest less.
Value Creation - I
4. Why Focus on Value?

If a nation does not provide an adequate environment for global investors to make appropriate returns on invested capital, they will fall behind in the race for global competitiveness and erode their standard of living.

Value Creation - I
4. Why Focus on Value?

If Return on Invested Capital (ROIC)<0, a company cannot generate enough cash to stay in business and will either go bankrupt or require government support.

If ROIC is greater than zero but less than the Weighted Average Cost of Capital (WACC), the company is "profitable" but it will not provide an adequate return for the suppliers of capital. This company is destroying value and will not be able to raise capital in the future.
<table>
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<th>Value Creation - I</th>
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<tbody>
<tr>
<td>4. Why Focus on Value?</td>
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</tbody>
</table>

Most companies have ROIC equal to the WACC on average across business cycles. That is, suppliers of capital expect to earn a fair rate of return.

**The Management Challenge:**

To earn more than the company's cost of capital in the long run. This adds value.
Value Creation
Part II: Value Management

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Value Creation - II
1. Overview

Ingredients:

- Focus on long-run cashflows not quarterly EPS
- Dispassionate, value-oriented view of corporate activities
- Ability to adopt outsider's view of business and willingness to act on opportunities that create incremental value
- Develop and institutionalize a managing value philosophy throughout the organization
### Value Creation - II

#### 1. Overview

**Value orientation involves:**

1. Restructuring
   - unleash value trapped within company
   - involves costs like divestitures and layoffs

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**Value orientation involves:**

2. Value oriented approach to leading and managing company after restructuring
   - priorities based on value creation
   - gearing planning
   - performance measurement
   - incentive compensation systems toward shareholder value
   - communication to investors
Value Creation - II
2. Assessing Restructuring Opportunities

Critical Steps:

1. Current market value
2. Company "as is" (using current business plan)
3. Potential value with internal improvements
4. Potential value with internal and external improvements
5. Optimal restructured value

Value Creation - II
2. Assessing Restructuring Opportunities

1. Current Valuation:

A. Review market performance
   • determine returns to shareholders compared with other investments
   • analysis of comparables
Value Creation - II
2. Assessing Restructuring Opportunities

Market Performance Analysis

Cumulative Performance

<table>
<thead>
<tr>
<th>Feb-86</th>
<th>Feb-87</th>
<th>Feb-88</th>
<th>Feb-89</th>
<th>Feb-90</th>
<th>Feb-91</th>
<th>Feb-92</th>
<th>Feb-93</th>
<th>Feb-94</th>
<th>Feb-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500 Comparables</td>
<td>Our Firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Current Valuation:

B. Analyze comparative corporate performance
   - develop initial picture of company performance that underlies the market performance
   - e.g. was the market price depressed after acquisitions were announced?
**Value Creation - II**

2. Assessing Restructuring Opportunities

1. **Current Valuation:**

   C. Understand corporate cash flows
      - identify where the corporation has been generating and investing cash and the return this investment is generating

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**Value Creation - II**

2. Assessing Restructuring Opportunities

1. **Current Valuation:**

   C. Understand corporate cash flows -- STEPS
      - Break firm into divisions (include corporate as a separate division)
      - Calculate Gross Investment for each division (includes capital expenditures, acquisitions, increases in working capital and other investments)
      - Calculate Gross Cash Flow for each division (includes after tax operating profits plus depreciation)
      - Difference is Free Cash Flow

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Value Creation - II
2. Assessing Restructuring Opportunities

1. Current Valuation:

C. Understand corporate cash flows -- STEPS
• Difference is Free Cash Flow
• Calculate pretax Rate of Return on Invested Capital (ROIC) for each division

<table>
<thead>
<tr>
<th>Total Gross Cash Flow</th>
<th>Firm</th>
<th>Total Gross Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1</td>
<td>FCF</td>
<td>ROIC</td>
</tr>
<tr>
<td>Division 2</td>
<td>FCF</td>
<td>ROIC</td>
</tr>
<tr>
<td>Division 3</td>
<td>FCF</td>
<td>ROIC</td>
</tr>
</tbody>
</table>
# Value Creation - II

## 2. Assessing Restructuring Opportunities

### 1. Current Valuation:

D. Synthesize Market Views
- identify assumptions that form the basis for the current market value
- read security analysts reports

### 2. Value "As Is"

- Develop cost of capital for each division
- Value each division based on current plan (As Is)
- Value each division based on historical extrapolation say last three years average growth (Extrapolation)
- Compare to market value
- Determine Value Gap
Value Creation - II
2. Assessing Restructuring Opportunities

<table>
<thead>
<tr>
<th>Extrapolation</th>
<th>Current</th>
<th>Plan</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1</td>
<td>200</td>
<td>210</td>
<td>5%</td>
</tr>
<tr>
<td>Division 2</td>
<td>500</td>
<td>600</td>
<td>20%</td>
</tr>
<tr>
<td>Division 3</td>
<td>300</td>
<td>390</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>1200</td>
<td>20%</td>
</tr>
<tr>
<td>Debt</td>
<td>250</td>
<td>250</td>
<td>0%</td>
</tr>
<tr>
<td>Equity Value</td>
<td>750</td>
<td>950</td>
<td>27%</td>
</tr>
<tr>
<td>Market Value</td>
<td>900</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Value Gap</td>
<td>-150</td>
<td>-50</td>
<td></td>
</tr>
</tbody>
</table>

2. Value "As Is":

We can learn from this analysis:
- identify dogs quickly, i.e. low value compared to investment
- assess the role of corporate headquarters on overall value
- DON'T BE SATISFIED IF PLAN=MARKET VALUE
Value Creation - II
2. Assessing Restructuring Opportunities

3. Potential Value with Internal Improvements:

- Assess how much more each business might be worth under more aggressive plans and strategy
- Identify value drivers

Value Creation - II
2. Assessing Restructuring Opportunities

3. Potential Value with Internal Improvements:

- Analysis of the Value Chain
  - Are there opportunities of compress chain?
  - Are there opportunities to expand chain?
  - Vertical/Horizontal compression/expansion?
3. Potential Value with Internal Improvements:

- Where is the corporation, the competition in strategic differentiation/cost space?
- Where does the corporation want to position itself?
### Value Creation - II

#### 2. Assessing Restructuring Opportunities

3. **Potential Value with Internal Improvements:**

- Estimate impact on value of: increasing sales growth by 1%, boosting margins by a point, reducing capital intensity, etc. (hold other factors constant)
- Scenario analysis: Macro factors/Micro factors

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### Value Creation - II

#### 2. Assessing Restructuring Opportunities

3. **Potential Value with Internal Improvements:**

- Influence factors:
  - Political
  - Social
  - Economic
  - Technological
### Value Creation - II
#### 2. Assessing Restructuring Opportunities

**3. Potential Value with Internal Improvements:**

- Influence targets:
  - Supply dynamics (materials, labor, financing)
  - Competitors (direct, indirect)
  - Demand dynamics (existing, potential)

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**What do we know with reasonable certainty about the future?**

**What are the uncertainties that form the basis for our scenario analysis?**
## Value Creation - II

### 2. Assessing Restructuring Opportunities

<table>
<thead>
<tr>
<th></th>
<th>Extrapolation</th>
<th>Current Plan</th>
<th>Potential</th>
<th>Difference in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1</td>
<td>200</td>
<td>210</td>
<td>300</td>
<td>33%</td>
</tr>
<tr>
<td>Division 2</td>
<td>500</td>
<td>600</td>
<td>700</td>
<td>40%</td>
</tr>
<tr>
<td>Division 3</td>
<td>300</td>
<td>390</td>
<td>450</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>1000</td>
<td>1200</td>
<td>1450</td>
<td>45%</td>
</tr>
<tr>
<td>Debt</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>0%</td>
</tr>
<tr>
<td>Equity Value</td>
<td>750</td>
<td>950</td>
<td>1100</td>
<td>47%</td>
</tr>
<tr>
<td>Market Value</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>Value Gap</td>
<td>-150</td>
<td>-50</td>
<td>+200</td>
<td></td>
</tr>
</tbody>
</table>

### 4. Potential Value with External Improvements:

Four scenarios for each division:

1. Sale to strategic buyer (another company who could realize operating and strategic synergies)
2. a flotation or spin-off
3. a leveraged buyout by management or third party
4. a liquidation
4. Potential Value with External Improvements:

Start with spinoff (because it is easiest)
- identify publicly traded comparables
- use current stock market valuation data (price to earnings, market to book and market to sales ratios) to estimate the value of division as a freestanding entity

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4. Potential Value with External Improvements:

Analysis of strategic buyer is often informative:
- what are the sources of value strategic buyer will see?
- what specific improvements are likely?
- what cost savings could be realized?
Value Creation - II
2. Assessing Restructuring Opportunities

<table>
<thead>
<tr>
<th></th>
<th>Division 1</th>
<th>Division 2</th>
<th>Division 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBO</td>
<td>275</td>
<td>600</td>
<td>450</td>
</tr>
<tr>
<td>Spin-off</td>
<td>260</td>
<td>500</td>
<td>400</td>
</tr>
<tr>
<td>Liquidation</td>
<td>210</td>
<td>450</td>
<td>370</td>
</tr>
<tr>
<td>Strategic Buyer</td>
<td>290</td>
<td>550</td>
<td>475</td>
</tr>
<tr>
<td>Highest Value</td>
<td>290</td>
<td>600</td>
<td>475</td>
</tr>
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</table>

5. Potential Value of Financial Engineering:

- Analyze the tax advantages of debt financing
- Assess the business-cycle impact on cash flows
- Potentially take downgrade in debt to obtain higher leverage and increased tax savings
- Don't hesitate to use some of the new debt to repurchase shares or to pay special dividends
Value Creation - II
2. Assessing Restructuring Opportunities

6. The Restructuring Plan:

- Choose best alternatives for each division (internal, external improvements)
- Review corporate overhead
- Recapitalize by increasing debt
- Develop strategy to communicate the new restructuring plan to the public and its potential impact on the value of the firm

Value Creation - II
3. Implementing Value Management

Six Steps:

1. Focus planning and business performance reviews around value creation
2. Develop value oriented targets and performance measures
3. Restructure compensation system to foster an emphasis on creating shareholder value
Value Creation - II
3. Implementing Value Management

Six Steps:
1. Evaluate strategic investment decisions explicitly in terms of their impact on value
2. Begin communicating more clearly with investors and analysts about the value of plan
3. Reshape role of CFO

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Value Creation - II
3. Implementing Value Management

Inject Value into Planning

- Responsibility of all senior managers to be value oriented
- Implement annual restructuring reviews to identify any opportunities within firm's portfolio.
- Immediate need to implement restructuring plan
- Develop plan to sustain firm's advantage after initial restructuring
Value Creation - II
3. Implementing Value Management

Inject Value into Planning

At the firm level:
- Inventory firm's skills and assets compared with competition
- Analyze how these skills may translate into new businesses that the firm may enter

Value Creation - II
3. Implementing Value Management

Inject Value into Planning

At the division level:
- Division managers must think differently about business
- Focus on what is driving the value of division
- Less emphasis on growth in earnings
- Forego some investments (which would have increased earnings) that would have been routinely accepted in the past
### Value Creation - II
3. Implementing Value Management

**Value Oriented Targets and Performance Measures**

Stock price is the ultimate measure but not necessarily useful for the divisional managers.

Traditional accounting measures like net income ignore the opportunity cost of capital.

Return on invested capital ignores value creating growth.

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**Value Oriented Targets and Performance Measures**

Economic Profit = Spread between return on capital minus its opportunity cost times the quantity of invested capital

Logical metric because the discounted value of future economic profit (plus current amount of invested capital) equals the value.
### Value Creation - II
3. Implementing Value Management

#### Value Oriented Targets and Performance Measures

Maximizing Economic Profit also maximizes firm value.

Translate Economic Profit targets into specific operational performance measures for divisional managers (e.g. manufacturing, cost per unit, quality, meeting delivery schedules, ...)

New integrated targeting system and performance measurement challenge for the accounting group.

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### Value Creation - II
3. Implementing Value Management

#### Tie Compensation to Value

- Eliminate bonus payments linked to EPS targets
- Make divisional manager's compensation link to division's performance rather than the entire firm
- Explore possibility of phantom stock for each division
- Deferred compensation based on economic profit

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Value Creation—II
3. Implementing Value Management

Assess Value of Strategic Investments

Change the way firm examines spending proposals

- Use discounted cash flow analysis
- Do not use firm wide hurdle rate as evaluation criteria
- Do not use division wide hurdle rate as criteria unless project commands same risk as division
- Do not ignore the value of strategic options when implementing the DCF analysis

...
Value Creation - II
3. Implementing Value Management

Develop Investor Communication Strategy

- Track analysts' views and meet with some of them
- Make sure the market has sufficient information to value the firm
- Communications with the market (at security analysts meetings, annual general meeting, press releases) should focus on what the firm is doing to build value

Reshape the Role of the CFO

Corporate Strategy - Take the lead role in coordinating the development of a value-maximizing corporate strategy.

1. Ensure that plans are in place to create maximum value from current businesses.
   - Assess the value creation potential on an on going basis
**Value Creation - II**

3. Implementing Value Management

**Reshape the Role of the CFO**

**Corporate Strategy -**

- Ensure that plans focus on key issues by (1) challenging key assumptions and the rationale for changes in performance and (2) providing external reference points for value creation.
- Act as sounding board for CEO and division heads on critical proposals
- Develop financial measurement standards to monitor performance

---

**Value Creation - II**

3. Implementing Value Management

**Reshape the Role of the CFO**

**Corporate Strategy -**

2. Support the development of corporate expansion strategies to create additional shareholder value

3. Planning and executing major transactions required to implement firm's strategy
### Value Creation - II
3. Implementing Value Management

**Reshape the Role of the CFO**

**Financial Strategy** - Develop, recommend and execute an overall financial strategy that supports the business strategies and captures maximum value for the shareholders

1. Develop value creating capital structure and dividend policy recommendations

### Value Creation - II
3. Implementing Value Management

**Reshape the Role of the CFO**

**Financial Strategy** -

2. Design and manage a strategy for communicating key elements of strategy to investors and financial community

3. Negotiate and execute all major financial transactions
Reshape the Role of the CFO

**Budgeting and Management Control** - Design and implement processes to ensure that managers have the right information to set goals, make decisions and monitor performance.


2. Develop key performance measures for each business unit.

---

3. Ensure that business units have adequate management controls in place

4. Evaluate business performance in conjunction with the CEO and division heads.
## Value Creation - II

### 3. Implementing Value Management

**Reshape the Role of the CFO**

**Financial Management** - Ensure the effective and efficient management of the firm's financial operations

1. Ensure that all external reporting and compliance obligations are fulfilled.

2. Establish controls to safeguard assets.

### Value Creation - II

### 3. Implementing Value Management

**Reshape the Role of the CFO**

**Financial Management** -

3. Ensure the integrity and efficiency of cash, receivables and payables management

4. Filing and paying all tax obligations

5. Pursuing opportunities to reduce tax burden
## Value Creation - II
### 3. Implementing Value Management

**Reshape the Role of the CFO**

**Financial Management -**

6. Management of pension fund

7. Management of risk management programs

---

**Value Creation - II**

### 3. Implementing Value Management

**Reshape the Role of the CFO**

**Success Criteria - One Year From Now**

- Well defined corporate strategy will have been completed and in early stages of implementation
- Financial strategy will have been developed and implementation will have begun
- Division heads will be thinking in terms of shareholder value when developing their plans and evaluating proposals
### Value Creation - II
3. Implementing Value Management

#### Reshape the Role of the CFO

**Success Criteria - One Year From Now**

- The financial management functions will be operating smoothly
- Security analysts will understand the firm's strategy and evaluate it as a strong operating company rather than a breakup candidate

#### Value Creation - II
3. Implementing Value Management

#### Reshape the Role of the CFO

**Success Criteria - Three Years From Now**

- Firm will provide shareholders with superior returns
- Firm will have begun pursuing value creating expansion initiatives
- Security analysts will view firm as a leading edge value manager
Value Creation - II
4. Internal Performance Measures

- Standard budgeting numbers are accounting based and are inconsistent with market valuation.

- Use of such measures distorts incentives of operating managers and potentially leads to poor decisions.

- Idea of Net Present Value is important but is difficult to implement as part of the budgeting process.

---

Value Creation - II
4. Internal Performance Measures

- Challenge is to start with accounting numbers and come up with internal measures of performance that are more consistent with market valuations.

- In particular, measures of performance based on operating cash flows ignore the real cost of capital.

- Accounting returns on equity is incorrect as it ignores risk and the market valuation of capital.
"Most performance evaluation systems are not actionable. They don't tell people what to do."

--Timothy Sheehan, Vice-President, Bank of America

- Challenge is to come up with an internal control system that is easy to implement and informative for decision making.

- One approach is to impute a capital cost for all operating divisions based on the amount of their capital and on the cost of capital for that division.

- Next, we demonstrate how to calculate the Economic Value Added for Anheuser Busch and Speigel (Source: Fortune).
### Value Creation - II
#### 4. Internal Performance Measures

After tax operating profit - cost of capital = EVA

<table>
<thead>
<tr>
<th>Profit/Value</th>
<th>Rate</th>
<th>Company</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,756 (Op)</td>
<td>11.3%*</td>
<td>Anheuser Busch's</td>
<td>$8 billion EVA $235 million</td>
</tr>
<tr>
<td>$1,139 (Op)</td>
<td>-</td>
<td></td>
<td>$904 million</td>
</tr>
<tr>
<td>$-616 (Tax)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*11.3% = (67% equity @ 14.3%) + (33% debt at 5.2%)

### Value Creation - II
#### 4. Internal Performance Measures

After tax operating profit - cost of capital = EVA

<table>
<thead>
<tr>
<th>Profit/Value</th>
<th>Rate</th>
<th>Company</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>$188 (Op)</td>
<td>11.1%*</td>
<td>Spiegel's</td>
<td>$1.6 billion EVA -$59 million</td>
</tr>
<tr>
<td>$119 (Op)</td>
<td>-</td>
<td></td>
<td>$178 million</td>
</tr>
<tr>
<td>$-69 (Tax)</td>
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</tbody>
</table>

*11.1% = (37% equity @ 18.3%) + (63% debt at 6.8%)
Such internal performance measures are not perfect as they do not always agree with NPV maximization.

However, the correlation with NPV is very high and are closer to NPV maximization that traditional accounting measures.

The are also consistent with the way that the budgeting and planning process is run and hence are easier to implement internally in the organization.

These internal performance measures help change the internal culture of the company towards market value maximization.
### Value Creation - II
#### 4. Internal Performance Measures

**Summary**
Internal measures like EVA are important because:

- Changes the corporate culture away from "status quo" oriented management and towards value maximization.
- They align the incentives of operating managers with those of shareholders.
- Explicitly acknowledge the "cost of capital" which is often ignored in internal decision making.
- Is positively correlated with market value maximization.
Value Creation
Part III: Discounted Cash Flow Method

Campbell R. Harvey
Duke University and NBER

Value Creation - III
1. Overview

Although earnings per share is useful in some situations, its simplicity allows managers to ignore other important factors that affect the value of firm.

Can lead to decisions that destroy value in long term, (without the short-term share price improvement that was hoped for).
Value Creation - III
1. Overview

Example

Cable TV companies are routinely valued by multiplying the subscriber base times some value.

However, this implies that the "value" of the firm can be increased by increasing the subscriber base.

But if this is accomplished by slashing fees, value could be destroyed.

Accounting earnings is useful for valuation only when earnings is a good proxy for the expected long-term cash flow.
- Not all companies generate the same cash flow for each dollar in earnings.
- Earnings approaches only good for extremely rough value calculations.
Two competing approaches:

- Accounting approach: All that matters is the accounting earnings of the business. Value is simply earnings times some multiple (often P/E). In extreme form, approach says that only this year's or next years earnings count. A more complex form would discount future stream of earnings.

- DCF approach: The value of a business is the future expected cash flow discounted at a rate that reflects the riskiness of the cash flow.
Example:

Firm A--Uses manufacturing equipment that must be replaced every three years

Firm B--Uses equipment that must be replaced every year but at one third the cost.

Both have same level of earnings and growth rates.

<table>
<thead>
<tr>
<th>Firm A</th>
<th>Year 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>1100</td>
<td>1200</td>
<td>1300</td>
<td>1450</td>
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<tr>
<td>Cash Exp</td>
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<td></td>
<td>(790)</td>
<td>(880)</td>
<td>(970)</td>
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<td>Deprec.</td>
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<tr>
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<td>100</td>
<td>105</td>
<td>110</td>
<td>120</td>
<td>140</td>
<td></td>
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</table>

<table>
<thead>
<tr>
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<th>Year 1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
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## Value Creation - III
### 2. DCF and Value

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<td></td>
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<td>(200)</td>
<td>(200)</td>
<td>(200)</td>
<td>(200)</td>
<td>1200</td>
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<td>0</td>
<td>(600)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Inc. Receiv</td>
<td>(250)</td>
<td>(13)</td>
<td>35</td>
<td>45</td>
<td>(23)</td>
<td>(219)</td>
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<tr>
<td></td>
<td>Cash</td>
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<td>297</td>
<td>(245)</td>
<td>375</td>
<td>322</td>
<td>49</td>
</tr>
<tr>
<td>Firm B</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td></td>
<td>Inc. Receiv</td>
<td>(150)</td>
<td>(6)</td>
<td>(8)</td>
<td>(15)</td>
<td>(15)</td>
<td>(23)</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>(60)</td>
<td>97</td>
<td>102</td>
<td>105</td>
<td>115</td>
<td>122</td>
</tr>
</tbody>
</table>

---

### Example:

Most would prefer Firm B (more cash received closer to today)

Discounting cash flows at 10%:

NPV of Firm A = $212
NPV of Firm B = $323
This example highlights main weakness of earnings approach.

Does not consider the investment required to generate earnings nor its timing.

---

Firm A has less value because it invests more capital (or same amount earlier) to generate the same level of sales and earnings.

Accounting approach ignores this difference by concentrating on P/E as a function of expected earnings growth.
Value Creation - III
2. DCF and Value

DCF approach is based on simple premise:

An investment adds value if it generates a return on investment above the return that can be earned on investments of similar risk.

Value Creation - III
2. DCF and Value

Why has earnings approach survived?

When earnings reflect cash flows (e.g. business with very little capital), accounting approach provides a reasonably good proxy.
Value Creation - III
2. DCF and Value

Earnings approach open to manipulation.

For example, increase this year's revenues by recording revenues which would usually be recorded in second year.

- DCF approach would not be fooled by this manipulation.

---

Value Creation - III
2. DCF and Value

There are some "fixes" to the accounting valuation model. However, they usually break down when
- varying accounting treatment of inventories and depreciation
- inflation distorts the relation between accounting earnings and cash flow
- investment in one year does not earn a constant rate of return
- cyclicalities is not dealt with by the accounting model
Value Creation - III
2. DCF and Value

Does the market naively respond to earnings?

No. Of course, the market reacts to quarterly earnings announcements. When the announcement deviates from expectations, the announcement contains news which is potentially relevant for future cash flows.

---

Value Creation - III
3. Does the Stock Market Value DCF

Accounting Earnings are Not Well Correlated with Share Prices.

- Historically, there is a low correlation between P/E ratios and stock returns

---
Value Creation - III  
3. Does the Stock Market Value DCF

**Accounting Earnings are Not Well Correlated with Share Prices.**

Value created when company earns a higher rate of return than the opportunity cost of capital.

However, the return on invested capital is not enough to value a firm -- we also need the growth rate.

---

Value Creation - III  
3. Does the Stock Market Value DCF

**Accounting Earnings are Not Well Correlated with Share Prices.**

Screen analysis by ROIC-Cost of Capital and by Sales Growth
<table>
<thead>
<tr>
<th>ROIC-CC-&lt;</th>
<th>-5% to -2%</th>
<th>-2% to 2%</th>
<th>2% to 5%</th>
<th>&gt;5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;3%</td>
<td>1.5</td>
<td>1.8</td>
<td>1.7</td>
<td>(*)</td>
</tr>
<tr>
<td>3%-6%</td>
<td>1.6</td>
<td>2.1</td>
<td>1.9</td>
<td>(*)</td>
</tr>
<tr>
<td>6%-9%</td>
<td>1.5</td>
<td>1.6</td>
<td>2.0</td>
<td>2.9</td>
</tr>
<tr>
<td>9%-12%</td>
<td>1.3</td>
<td>2.0</td>
<td>2.3</td>
<td>4.0</td>
</tr>
<tr>
<td>12%-15%</td>
<td>1.8</td>
<td>1.8</td>
<td>2.8</td>
<td>(*)</td>
</tr>
<tr>
<td>&gt;15%</td>
<td>(*)</td>
<td>1.7</td>
<td>3.1</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Value Creation - III
3. Does the Stock Market Value DCF

Accounting Earnings are Not Well Correlated with Share Prices.

Screen analysis by ROIC minus Cost of Capital and by Sales Growth.

Note: Market values based on expectations, hence, high market to book ratios imply improving performance.
Accounting Earnings are Not Well Correlated with Share Prices.

This is another piece of evidence that cash flow, driven by the combination of growth and spreads, drives value -- not growth in earnings.

---

Earnings Window Dressing Does Not Help Share Prices

Market is not fooled by accounting techniques that "improve" earnings.

Example: Inventory methods. In periods of rising prices, LIFO methods result in lower earnings than FIFO because cost of goods based on more recent higher costs.
### Earnings Window Dressing Does Not Help Share Prices

**Example:** *Inventory methods.*

Lower earnings means lower income taxes. Pretax cash flows the same, but after tax cash flows higher with LIFO.

But accounting model would suggest that switching to LIFO would reduce share price because of lower earnings.

### Earnings Window Dressing Does Not Help Share Prices

**Example:** *Inventory methods.*

Empirical evidence suggests that FIFO to LIFO switches are characterized by higher share prices.

Exactly what DCF model predicts.
Earnings Window Dressing Does Not Help Share Prices

Other empirical work, suggests that window dressing has no impact on valuation.

---

Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Some managers think that the market focusses on near term earnings and does not give credit for long-term investments.

Immediate counterexample: Biotechnology.
Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Simple empirical test: How much of a company's current share price can be accounted for by its expected dividends over the next five years?

Impact of Future Dividends on Share Price
20 Fortune 500 Companies

Source: McKinsey
Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

R&D is another excellent example. A firm can increase short-term cash flows by cutting back on R&D.

- Evidence suggests that market reacts positively to R&D spending announcements.

- Companies with the highest level of R&D spending also have highest P/E ratios.
Value Creation - III
3. Does the Stock Market Value DCF

Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Another example is capital expenditures. Evidence in McConnell and Muscarella.

- Market reacts positively to capital spending increases.
- Market reacts negatively to capital spending decreases.

Value Creation - III
3. Does the Stock Market Value DCF

Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Another example: writeoffs.

- Market reacts favorably when firm writes off bad investment despite the negative short-term earnings implications.
Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Another example: writeoffs.

- Evidence in Mercer. Finds that 60% of writeoffs were associated with positive stock price reaction.
- 75% of writeoffs which resulted in abandonment of a business segment resulted in positive stock price reaction.

Sacrificing Long-Term Cash Flows for Short-Term Earnings Improvements Does not Work

Another example: exchange offers and stock swaps.

- Copeland and Lee find that EPS impact did not matter -- critical determinant of market reaction was whether the exchange increased or decreased leverage.
Impact on Share Value

<table>
<thead>
<tr>
<th>Leverage</th>
<th>EPS-Increasing Transactions</th>
<th>EPS-Decreasing Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing</td>
<td>3.77%</td>
<td>8.41%</td>
</tr>
<tr>
<td>Decreasing</td>
<td>-1.18%</td>
<td>-0.41%</td>
</tr>
</tbody>
</table>

Value Creation - III

4. Market Efficiency

Maximizing value only makes sense if market is efficient. That is, the market correctly interprets information and reflects that information in share prices.

- Considerable evidence that the U.S. market is informationally efficient.
Value Creation - III
4. Market Efficiency

However, it is possible for share prices to deviate from their long term fundamental values. Efficiency is a relative concept.

But it is extremely unlikely that a deviation from fundamental value will be long-lived.

Hence, what should matter to the manager is the long-term behavior of share price (not whether it is 5% undervalued in one particular week).

---

Value Creation - III
5. Case Studies: Warner-Lambert

The Announcement

On November 26, 1985, Warner-Lambert announced that it would dispose of its barely profitable high-tech health equipment operations, consolidate facilities and implement a voluntary early-retirement incentive plan. A large percentage of the sale proceeds were earmarked to buy back stock.
## Value Creation - III

### 5. Case Studies: Warner-Lambert

**The Charge**

Special charge of $654 million ($553 million after taxes, or $7.10 a share).

First full-year deficit in the company's history (loss of $354 million).

---

**The Market Impact**

The market "punished" Warner-Lambert for showing a bookkeeping loss by sending its stock up 10%, from $40 to $44.

The market value of equity increased by $300 million.
Value Creation - III
5. Case Studies: Warner-Lambert

Warner-Lambert vs. S&P 500
Restructuring Announcement

Days relative to announcement
S&P scaled to Warner-Lambert

The Numbers

Warner-Lambert's Deseret Medical, IMED and Reichart Scientific Instruments units were in trouble. Sales were dropping; profits just above breakeven; depreciation not being replaced.
### Value Creation - III
5. Case Studies: Warner-Lambert

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1984</th>
<th>1983</th>
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<tr>
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<td>Ident.Asets</td>
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<tr>
<td>Depreciat.</td>
<td>32</td>
<td>43</td>
<td>42</td>
</tr>
</tbody>
</table>

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### Value Creation - III
5. Case Studies: Warner-Lambert

**The Economic Value Added Analysis**

Reduced the assets from $800 million to $279 million.

Suppose operating profits could be restored to $25 million per year or $15 million after taxes (NOPAT).

- Decision to sell implies an EVA saving of $25 million a year.
The Economic Value Added Analysis

- Estimated NOPAT: $15
- Estimated net liquidation: $279
- Return (r): 5.4%
- Cost of capital (c*): 12.3%
- (r-c*)x net liquidation: -6.9% x $279
- EVA: -$25 million

Value Creation - III
5. Case Studies: Warner-Lambert

The Aftermath

Year after the writeoff, Warner-Lambert surprised shareholders with a net nonrecurring pretax gain of $8.4 million which hid more than it revealed.

- Realized $196.4 million more on diversiture (EVA savings closer to 43.5 million)
- Offset by $188 million charge to close, consolidate, upgrade more facilities, centralize world R&D, expand voluntary early retirement, and reorganization.
### Value Creation - III
5. Case Studies: Warner-Lambert

<table>
<thead>
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<tbody>
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<td>Unadj</td>
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<td>-237.0</td>
<td>346.1</td>
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<td>461.7</td>
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<td>NOPAT</td>
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<td>+ unusual loss (gain) NOPAT</td>
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<td>553.3</td>
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<td>2532.2</td>
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<td>3061.9</td>
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<td>-9.1%</td>
<td>16.1%</td>
<td>22.3%</td>
<td>21.9%</td>
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<td>r</td>
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<td>10.5%</td>
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<td>16.7%</td>
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<tr>
<td>c*</td>
<td>15.3%</td>
<td>13.8%</td>
<td>11.5%</td>
<td>12.2%</td>
<td>12.3%</td>
</tr>
<tr>
<td>r-c*</td>
<td>-2.0%</td>
<td>-2.4%</td>
<td>-1.0%</td>
<td>4.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>x beginning capital</td>
<td>2715.4</td>
<td>2767.7</td>
<td>2850.0</td>
<td>2532.2</td>
<td>2770.6</td>
</tr>
<tr>
<td>EVA</td>
<td>-$55.3</td>
<td>-$64.6</td>
<td>-$29.7</td>
<td>$109.9</td>
<td>$120.9</td>
</tr>
</tbody>
</table>

### Value Creation - III
5. Case Studies: Warner-Lambert

#### Warner-Lambert vs. S&P 500
Long-Horizon Analysis

[Graph showing comparison between Warner-Lambert and S&P 500 values over time]
Value Creation - III
5. Case Studies: McCaw Cellular

- Usual financial data is meaningless as McCaw is emphasizing long-term growth and not current results.

- Consider statement by CEO in 1987 annual report
  (Source: Bennett Stewart, The Quest for Value)

"During the last six years we have challenged conventional wisdom by investing heavily in an unproven industry which many people viewed as highly speculative. We committed early to the industry and throughout this period paid what were then record prices for cellular properties. During this period we also challenged convention wisdom by making use of financial leverage and by emphasizing growth in shareholder value through long-term growth in operating cash flows rather than short-term book earnings." Craig O. McCaw, 1987
Value Creation - III
5. Case Studies: McCaw Cellular

The Outcome

- Monday August 17, 1993, AT&T agrees to buy McCaw Cellular Communications for $12.6 billion in stock.
- Including McCaw's $5 billion in debt (which AT&T assumes), this was the second largest acquisition in U.S. history.
- News of agreement caused McCaw's class A shares to rise $5 to $56.25 (or approximately 10%).

Value Creation - III
5. Case Studies: FASB and Employee Options

The Issue

- Tempers have flared over FASB plan that companies change the cost of stock options they grant.
- Currently options are not charged when granted or when exercised.
- Curious treatment - which is accorded no other type of expense.
The Issue

- Confusion roots to the 1950's when no one could agree on a formula to value options.

- Faced with various opinions on how to value options, accountants chose to do nothing, even though everyone attempting to solve the valuation problem agreed that the options were valuable.

The Complaints

- Frequently heard in Silicon Valley -- if companies must charge their earnings for stock option grants, their stock prices will plummet -- and they will find it too costly to raise investment capital they need to grow.

- Clearly, charges for options will lower reported earnings.

- But stock prices are not simple multiples of earnings per share.
### Value Creation - III

#### 5. Case Studies: FASB and Employee Options

**Value and Accounting Earnings**

- Stock prices are based on market estimates of future earnings.

- Analysts and brokers following company stock already know how many optioned shares the company has granted and have factored in potential dilution into their calculations.

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**Value and Accounting Earnings**

- To the extent that stock prices adjust, the adjustment, up or down, is correcting an error -- not causing one.
Value Creation

Part IV: Fit and Focus

Campbell R. Harvey
Duke University and NBER

Value Creation - IV
1. Fit

Fit represents the idea that a firm ought to divest a division to another firm if the division "fits" better with the other firm.

Other firm places a higher value on the division due to synergies, etc.
**Value Creation - IV**

1. **Fit**

Hence, even if the firm is running a division extremely well (there are no internal re-engineering opportunities), the division ought to be sold if another firm places a higher value due to fit.

**Example:** Union Carbide's sale of Eveready Battery (its 'crown jewel') to Ralston Purina.

---

| ![Image](image.png) | ![Image](image.png) | ![Image](image.png) |

---

**Value Creation - IV**

1. **Fit**

Union Carbide created value by selling battery business to Ralston.

"As for the purchaser, Ralston Purina - a total consumer products company with broad consumer distribution, with wholesale leverage, with consumer marketing smarts, and the ability to look at a megabuck consumer advertising budget without feeling faint - the battery business is in a much more congenial environment than it ever was at Carbide. **Robert D. Kennedy, Chairman & CEO, Union Carbide.**

---

| ![Image](image.png) | ![Image](image.png) | ![Image](image.png) | ![Image](image.png) |
### Value Creation - IV

#### 1. Fit

#### Union Carbide Sale of Eveready Creates Value.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total selling price</td>
<td>$1.4 billion</td>
</tr>
<tr>
<td>Selling price relative to Carbide's presale equity value</td>
<td>49%</td>
</tr>
<tr>
<td>Union Carbide stock price increase on the announcement</td>
<td>16%</td>
</tr>
<tr>
<td>Net value created</td>
<td>$464 million</td>
</tr>
</tbody>
</table>

\[(16\% \times 2.9 \text{ billion})\]

### Value Creation - IV

#### 1. Fit

#### Ralston's Purchase of Eveready Creates Value.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total selling price</td>
<td>$1.4 billion</td>
</tr>
<tr>
<td>Selling price relative to Ralston's presale equity value</td>
<td>33%</td>
</tr>
<tr>
<td>Ralston Purina stock price increase on the announcement</td>
<td>9%</td>
</tr>
<tr>
<td>Net value created</td>
<td>$385 million</td>
</tr>
</tbody>
</table>

\[(9\% \times 4.3 \text{ billion})\]
Example of value creation by divestitures.

- Divestitures can create value for both the seller and the buyer
- In Union Carbide's divestiture, a total of $849 million in value was created.
Value Creation - IV
2. Focus

Focus is the idea that the management of the firm ought to focus on those businesses where it has a competitive advantage (the "core competency" of the firm).

- Advocates of focus do not like conglomerate acquisitions
- They like firms that "focus" on a few core businesses and divest non-core businesses.

Managerial focus and spin-offs: Kraft Inc.

"A narrower but sharper focus on our core businesses has led to our increased willingness to be aggressive and to take greater risk whenever a potentially high payoff appears to warrant such actions."

John Richman, Kraft Chairman,
1986 Kraft Annual Report
Managerial focus and spin-offs: Kraft Inc.

Net value created = $610 million
(7% x $8.7 billion)
Value Creation - IV
2. Focus

Comment and Jarrell empirically measured the impact of focus. They calculated:

- Percent of firms reporting a single business segment
- The number of segments reported
- the number of 4-digit SIC codes assigned by Compustat
- Asset-based and Revenue-based Herfindahl indices

<table>
<thead>
<tr>
<th>Year</th>
<th># of firms</th>
<th>% with 1 segment</th>
<th># of segs reported</th>
<th># of SICs reported</th>
<th>Asset-base Herfindahl</th>
<th>Rev-base Herfindahl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>1703</td>
<td>36.2</td>
<td>2.59</td>
<td>4.17</td>
<td>0.684</td>
<td>0.683</td>
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<tr>
<td>1979</td>
<td>2008</td>
<td>38.1</td>
<td>2.53</td>
<td>4.09</td>
<td>0.698</td>
<td>0.696</td>
</tr>
<tr>
<td>1980</td>
<td>2000</td>
<td>38.8</td>
<td>2.50</td>
<td>4.08</td>
<td>0.703</td>
<td>0.701</td>
</tr>
<tr>
<td>1981</td>
<td>1991</td>
<td>40.2</td>
<td>2.45</td>
<td>4.03</td>
<td>0.709</td>
<td>0.707</td>
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<tr>
<td>1982</td>
<td>1953</td>
<td>40.9</td>
<td>2.42</td>
<td>3.98</td>
<td>0.713</td>
<td>0.715</td>
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<tr>
<td>1983</td>
<td>1963</td>
<td>41.8</td>
<td>2.38</td>
<td>3.91</td>
<td>0.716</td>
<td>0.721</td>
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<tr>
<td>1984</td>
<td>1934</td>
<td>43.4</td>
<td>2.30</td>
<td>3.78</td>
<td>0.730</td>
<td>0.731</td>
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<tr>
<td>1985</td>
<td>1917</td>
<td>46.0</td>
<td>2.20</td>
<td>3.63</td>
<td>0.745</td>
<td>0.748</td>
</tr>
<tr>
<td>1986</td>
<td>1938</td>
<td>50.3</td>
<td>2.08</td>
<td>3.46</td>
<td>0.768</td>
<td>0.769</td>
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<tr>
<td>1987</td>
<td>2038</td>
<td>53.6</td>
<td>2.00</td>
<td>3.22</td>
<td>0.786</td>
<td>0.788</td>
</tr>
<tr>
<td>1988</td>
<td>2085</td>
<td>55.7</td>
<td>1.94</td>
<td>3.23</td>
<td>0.797</td>
<td>0.800</td>
</tr>
<tr>
<td>1989</td>
<td>587</td>
<td>63.9</td>
<td>1.72</td>
<td>2.95</td>
<td>0.832</td>
<td>0.840</td>
</tr>
</tbody>
</table>
Value Creation - IV
2. Focus

![Graph showing the average wealth effects of focus change over time.]

3. Acquisitions

Need to integrate strategic analysis of acquisitions with financial analysis.

- Even if an acquisition is a good strategic fit, if the firm overpays for it, it is a bad idea.
- Overpaying for an acquisition implies that the synergy gains have been given away to the target shareholders.
- Generally, the stock market dislikes conglomerate (or diversifying) acquisitions and likes acquisitions that have synergies.
Value Creation - IV
3. Acquisitions

- The number of bidders has an important role to play in whether bidders get synergy gains or not.
- With just one bidder (friendly, quick negotiation), bidders do get some gains.
- With more than one bidder (competition), bidders tend to get close to zero gains.

Value Creation - IV
3. Acquisitions

Target Net of Market Returns

Event day relative to tender offer announcement day

Net of market returns in %

Multiple Bidder All Events Single Bidder
Value Creation - IV
3. Acquisitions

Acquirer Net of Market Returns Over Time

Net of market returns in %

Event day relative to tender offer announcement day

-20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80

Single Bidder
All Events
Multiple Bidder

Magtag Acquires Magic Chef:
Synergies of Horizontal Combination

- Maytag paid a 23% market premium for Magic Chef
- Emergence of four "heavyweights" in U.S. appliance industry (Whirlpool, GE, White, Maytag)
Value Creation - IV
3. Acquisitions

Magtag Acquires Magic Chef:
Synergies of Horizontal Combination

- White Consolidated acquires Frigidaire 1979
- Magic Chef acquires Admiral 1979
- Maytag acquires Jenn-Air 1982
- Whirlpool acquires Kitchenaid 1986
- Electrolux acquires White Consolidated 1986

• • • • •

Value Creation - IV
3. Acquisitions

Magtag Acquires Magic Chef:
Synergies of Horizontal Combination

- Magic Chef offers Maytag an entree into the refrigerator and freezer market with its Admiral line
- Redundant production facilities were eliminated
- Positive 12.9% abnormal return surrounding announcement

• • • • •
General Electric acquires Roper: The contested bid.

"It's pretty crazy the extent to which this is going."
—Nicholas Heyman, Analyst
Drexel Burnham

- GE paid a 107% premium over Roper's preannouncement trading price.

- Roper would have pushed Whirlpool ahead of GE as the premier U.S. appliance producer. It would also have further solidified Whirlpool's relationship with Sears.

- Roper offered GE closer ties to Sears and a valuable share of the gas stove market.
General Electric acquires Roper: The contested bid.

- GE's abnormal returns surrounding the announcement were -3.1%.
- The abnormal return over the course of the bidding was -4.5%. (GE's and Roper's market capitalizations were $40.2 billion and $228 million, respectively)
- The abnormal return wiped out the premium paid for Roper and more.

Wells Fargo acquires Crocker National: Operating of horizontal combinations

"Carl Reichardt is an expert at cutting expenses - that's the hallmark of Wells Fargo."

—unnamed analyst comment

"[The reason for the purchase] is quite simple. We wanted to be a major western bank with heavy emphasis on domestic operations." —Carl Reichardt, Chairman
Wells Fargo acquires Crocker National:
Operating of horizontal combinations

- Wells Fargo eliminated 5,000 jobs shortly after the acquisition.
- Crocker suffered enormous losses under Midland Bank from foreign, real estate and agricultural lending
- The cumulative abnormal return equaled 19.3%

Philip Morris acquires General Foods:
Pure diversification

"To protect earnings growth, we must use our resources to succeed in other businesses."

--Hamish Maxwell
Chairman and CEO,
Philip Morris
Philip Morris acquires General Foods:
Pure diversification

- Philip Morris paid a 50% market premium for General Foods.
- In the previous two years, Philip Morris had surpassed R.J. Reynolds in becoming the largest U.S. cigarette company.

A few months before Philip Morris announced its acquisition of General Foods, R.J. Reynolds had announced its purchase of Nabisco Foods, making it the largest U.S. consumer products company.
- The cumulative abnormal return surrounding the announcement was -10.3%.
Value Creation - IV
3. Acquisitions

Philip Morris Acquisition of General Foods
Announcement Date 9/24/85

Cumulative abnormal return in %

Day relative to announcement date

Eastman Kodak acquires Sterling Drug:
Pure diversification

Events
- January 4, 1988 -- Hoffman-LaRoche bids $72 per share for Sterling Drugs
- January 18, 1988 -- Hoffman raises its offer to $81
- January 22, 1988 -- Kodak announces its friendly bid of $89.50 for Sterling
Value Creation - IV
3. Acquisitions

Kodak's Price Reaction
Announcement 1/22/88

Cumulative abnormal returns in %

Day relative to announcement

Eastman Kodak acquires Sterling Drug:
Pure diversification

Deal Value = $5.1 billion
Sterling's market cap
30 days prior to
announcement $3.0 billion
Premium $2.1 billion

Kodak decrease $2.2 billion
Eastman Kodak sells Sterling Drug:
Focus

"Kodak's stock jumped $3.25 or 7.8% propelled by speculation that the company today will divulge details of a plan which could include a sale or spinoff of Kodak's Sterling Winthrop over-the-counter drug unit."

May 3, 1994, WSJ

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Eastman Kodak sells Sterling Drug:
Focus

"Kodak's decision to sell the units, which generated $3.7 billion last year or 23% of Kodak's sales, reverses nearly a decade of diversification efforts and shows the company's determination to regain its prominence in photography."

May 4, 1994, WSJ

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### Value Creation - IV
3. Acquisitions

<table>
<thead>
<tr>
<th>Deal</th>
<th>CAR -2/+3</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maytag/Magic Chef</td>
<td>12.9%</td>
<td>Product line acquisition</td>
</tr>
<tr>
<td>GE/Roper</td>
<td>-3.1%</td>
<td>Same as Maytag competitive bid</td>
</tr>
<tr>
<td>Wells Fargo/ Crocker</td>
<td>19.3%</td>
<td>Horizontal</td>
</tr>
<tr>
<td>Philip Morris/ General Foods</td>
<td>-10.3%</td>
<td>Diversification into unrelated business</td>
</tr>
<tr>
<td>Kodak/Sterling</td>
<td>-15.2%</td>
<td>Diversification unrelated -competitive</td>
</tr>
</tbody>
</table>

---

### Value Creation - IV
4. Summary

1. Increased focus usually enhances shareholder value.

2. Diversification doesn't usually work (let shareholders diversify their holdings on their own).

3. Dump division if outsider firm values it higher than you do (after internal improvements).