Corporate Finance

Aswath Damodaran

Stern School of Business
First Principles

- Invest in projects that yield a return greater than the minimum acceptable hurdle rate.
  - The hurdle rate should be higher for riskier projects and reflect the financing mix used - owners’ funds (equity) or borrowed money (debt).
  - Returns on projects should be measured based on cash flows generated and the timing of these cash flows; they should also consider both positive and negative side effects of these projects.

- Choose a financing mix that minimizes the hurdle rate and matches the assets being financed.

- If there are not enough investments that earn the hurdle rate, return the cash to stockholders.
  - The form of returns - dividends and stock buybacks - will depend upon the stockholders’ characteristics.

Objective: Maximize the Value of the Firm
The Classical Viewpoint

- **Van Horne**: "In this book, we assume that the objective of the firm is to maximize its value to its stockholders"

- **Brealey & Myers**: "Success is usually judged by value: Shareholders are made better off by any decision which increases the value of their stake in the firm... The secret of success in financial management is to increase value."

- **Copeland & Weston**: The most important theme is that the objective of the firm is to maximize the wealth of its stockholders."

- **Brigham and Gapenski**: Throughout this book we operate on the assumption that the management's primary goal is stockholder wealth maximization which translates into maximizing the price of the common stock.
The Objective in Decision Making

- In traditional corporate finance, the objective in decision making is to maximize the value of the firm.
- A narrower objective is to maximize stockholder wealth. When the stock is traded and markets are viewed to be efficient, the objective is to maximize the stock price.
- All other goals of the firm are intermediate ones leading to firm value maximization, or operate as constraints on firm value maximization.
The Criticism of Firm Value Maximization

- Maximizing stock price is not incompatible with meeting employee needs/objectives. In particular:
  - Employees are often stockholders in many firms
  - Firms that maximize stock price generally are firms that have treated employees well.

- Maximizing stock price does not mean that customers are not critical to success. In most businesses, keeping customers happy is the route to stock price maximization.

- Maximizing stock price does not imply that a company has to be a social outlaw.
Why traditional corporate financial theory focuses on maximizing stockholder wealth.

- Stock price is easily observable and constantly updated (unlike other measures of performance, which may not be as easily observable, and certainly not updated as frequently).
- If investors are rational (are they?), stock prices reflect the wisdom of decisions, short term and long term, instantaneously.
- The objective of stock price performance provides some very elegant theory on:
  - how to pick projects
  - how to finance them
  - how much to pay in dividends
The Classical Objective Function

STOCKHOLDERS

Maximize stockholder wealth

Hire & fire managers
- Board
- Annual Meeting

Lend Money

Protect bondholder interests

Reveal information honestly and on time

FINANCIAL MARKETS

BONDHOLDERS

SOCIETY

No Social Costs

Costs can be traced to firm

Markets are efficient and assess effect on value
What can go wrong?

**STOCKHOLDERS**
- Managers put their interests above stockholders
- Have little control over managers

**BONDHOLDERS**
- Lend Money
- Bondholders can get ripped off

**Managers**
- Delay bad news or provide misleading information

**FINANCIAL MARKETS**

**SOCIETY**
- Significant Social Costs
- Some costs cannot be traced to firm
- Markets make mistakes and can over react

9
THE REAL WORLD INTRUDES ..... I. Stockholder Interests vs. Management Interests

- **Theory**: The stockholders have significant control over management. The mechanisms for disciplining management are the annual meeting and the board of directors.

- **Practice**: Neither mechanism is as effective in disciplining management as theory posits.
The power of stockholders to act at annual meetings is diluted by three factors:

- Most small stockholders do not go to meetings because the cost of going to the meeting exceeds the value of their holdings.
- Incumbent management starts off with a clear advantage when it comes to the exercising of proxies.
- For large stockholders, the path of least resistance, when confronted by managers that they do not like, is to vote with their feet.
Board of Directors as a disciplinary mechanism

- Directors, for the most part, are well compensated and underworked

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>0</td>
</tr>
<tr>
<td>1988</td>
<td>100</td>
</tr>
<tr>
<td>1992</td>
<td>80</td>
</tr>
</tbody>
</table>

Directors’ Compensation and Hours Worked Per Year
The CEO hand-picks most directors.

- A survey by Korn/Ferry revealed that 74% of companies relied on recommendations from the CEO to come up with new directors; Only 16% used an outside search firm.
- Directors seldom hold more than token stakes in their companies. The Korn/Ferry survey found that 5% of all directors in 1992 owned less than five shares in their firms.
- Many directors are themselves CEOs of other firms.
Directors lack the expertise to ask the necessary tough questions..

- The CEO sets the agenda, chairs the meeting and controls the information.
- The search for consensus overwhelms any attempts at confrontation.
## The Best Boards Of Directors

<table>
<thead>
<tr>
<th>SW Rank</th>
<th>Overall Score</th>
<th>Survey Score</th>
<th>Analyst Score</th>
<th>Details</th>
<th>Board Performance Poll</th>
<th>Governance Guideline Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shares</td>
<td>Quality</td>
<td>Independence</td>
<td>Corporate Performance</td>
<td>Shareholder Accountability</td>
<td>Board Quality</td>
</tr>
<tr>
<td>1. Campbell Soup</td>
<td>87.1</td>
<td>43.1</td>
<td>44.0</td>
<td>Board involvement in recent CEO change rewrites the book on how to do it</td>
<td>9.7</td>
<td>9.0</td>
</tr>
<tr>
<td>2. General Electric</td>
<td>74.7</td>
<td>45.7</td>
<td>29.0</td>
<td>Won most votes in poll for best board, outside directors own lots of GE stock</td>
<td>8.6</td>
<td>8.6</td>
</tr>
<tr>
<td>3. Compaq Computer</td>
<td>72.8</td>
<td>28.3</td>
<td>44.5</td>
<td>Model board with none executive chair has delivered big results for investors</td>
<td>9.6</td>
<td>9.2</td>
</tr>
<tr>
<td>4. Microsoft</td>
<td>69.1</td>
<td>36.6</td>
<td>32.5</td>
<td>Small board wins praise from investors who don’t worry about CEO succession</td>
<td>8.0</td>
<td>8.3</td>
</tr>
<tr>
<td>5. IBM</td>
<td>68.0</td>
<td>30.5</td>
<td>37.5</td>
<td>Turnaround by board-recruited CEO keeps major shareholders happy</td>
<td>8.5</td>
<td>8.1</td>
</tr>
<tr>
<td>6. Chrysler</td>
<td>67.8</td>
<td>27.3</td>
<td>40.5</td>
<td>Leader in many governance practices, though many directors are too many boards</td>
<td>9.0</td>
<td>8.7</td>
</tr>
<tr>
<td>7. General Motors</td>
<td>67.2</td>
<td>26.2</td>
<td>41.0</td>
<td>Among first to publish guidelines, only weakness overexerted directors</td>
<td>7.0</td>
<td>7.2</td>
</tr>
<tr>
<td>8. Intel</td>
<td>67.1</td>
<td>27.5</td>
<td>32.0</td>
<td>Board gains high marks from investors, directors own lots of stock</td>
<td>9.1</td>
<td>8.4</td>
</tr>
<tr>
<td>9. Colgate Palmolive</td>
<td>66.9</td>
<td>26.4</td>
<td>40.5</td>
<td>All directors own significant stock, only one insider on board, the CEO</td>
<td>8.5</td>
<td>9.3</td>
</tr>
<tr>
<td>10. Texas Instruments</td>
<td>64.9</td>
<td>26.4</td>
<td>38.5</td>
<td>Pays half of retailer in stock, outsiders average more than $400K of stock</td>
<td>9.5</td>
<td>9.0</td>
</tr>
</tbody>
</table>
And the Worst Boards are ..

### The Worst Boards of Directors

<table>
<thead>
<tr>
<th>Rank</th>
<th>Overall Score</th>
<th>Survey Score</th>
<th>Analysis Score</th>
<th>Details</th>
<th>Shareholder Accountability</th>
<th>Board Quality</th>
<th>Board Independence</th>
<th>Corporate Performance</th>
<th>Shareholder Accountability</th>
<th>Board Quality</th>
<th>Board Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.3</td>
<td>1.8</td>
<td>8.5</td>
<td>Investors decry board for conflicts; many directors own little if any stock</td>
<td>3.3</td>
<td>4.3</td>
<td>2.0</td>
<td>5.8</td>
<td>-0.4</td>
<td>2.8</td>
<td>2.2</td>
</tr>
<tr>
<td>2</td>
<td>19.9</td>
<td>-16.6</td>
<td>27.5</td>
<td>Investors soon board for failing to control succession, not ousting CEO</td>
<td>3.0</td>
<td>4.2</td>
<td>3.5</td>
<td>2.8</td>
<td>2.0</td>
<td>5.2</td>
<td>7.4</td>
</tr>
<tr>
<td>3</td>
<td>15.4</td>
<td>-1.1</td>
<td>16.5</td>
<td>Longtime CEO dominates insider-filled board; resists investor calls for change</td>
<td>2.8</td>
<td>3.7</td>
<td>3.5</td>
<td>4.7</td>
<td>4.4</td>
<td>6.0</td>
<td>1.4</td>
</tr>
<tr>
<td>4</td>
<td>16.8</td>
<td>-12.2</td>
<td>29.0</td>
<td>Board changes fail to satisfy investors, who say directors still lack independence</td>
<td>2.3</td>
<td>2.1</td>
<td>2.0</td>
<td>4.7</td>
<td>4.4</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>5</td>
<td>21.1</td>
<td>-1.6</td>
<td>19.5</td>
<td>Investors disenchanted with performance, weakest attendance record of any board</td>
<td>2.6</td>
<td>4.6</td>
<td>1.3</td>
<td>3.5</td>
<td>5.6</td>
<td>7.6</td>
<td>5.0</td>
</tr>
<tr>
<td>6</td>
<td>22.0</td>
<td>-5.0</td>
<td>17.0</td>
<td>Board loaded with insiders, lacks an outsider with retail expertise or CEO</td>
<td>2.0</td>
<td>3.0</td>
<td>2.8</td>
<td>2.6</td>
<td>6.0</td>
<td>0.0</td>
<td>5.8</td>
</tr>
<tr>
<td>7</td>
<td>22.7</td>
<td>1.7</td>
<td>21.0</td>
<td>Board dominated by family members and insiders; lacks nominating panel</td>
<td>1.0</td>
<td>1.0</td>
<td>0.0</td>
<td>2.0</td>
<td>4.0</td>
<td>7.6</td>
<td>4.4</td>
</tr>
<tr>
<td>8</td>
<td>24.0</td>
<td>-1.5</td>
<td>25.5</td>
<td>Investors outraged over $95 million payout to CEO by cozy, aging board</td>
<td>1.3</td>
<td>2.0</td>
<td>1.1</td>
<td>2.0</td>
<td>2.8</td>
<td>6.0</td>
<td>5.8</td>
</tr>
<tr>
<td>9</td>
<td>27.2</td>
<td>4.2</td>
<td>23.0</td>
<td>Board has three consultants and a lawyer who do business with company</td>
<td>2.0</td>
<td>1.5</td>
<td>2.0</td>
<td>2.5</td>
<td>2.0</td>
<td>8.4</td>
<td>4.0</td>
</tr>
<tr>
<td>10</td>
<td>28.3</td>
<td>4.3</td>
<td>24.5</td>
<td>Tiny board with little business experience dominated by CEO</td>
<td>1.5</td>
<td>2.0</td>
<td>1.0</td>
<td>3.5</td>
<td>3.6</td>
<td>2.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>
# Who's on Board? The Disney Experience

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reveta F. Bowers</td>
<td>1, 5 Head of School, Center for Video Education</td>
</tr>
<tr>
<td>Roy E. Disney</td>
<td>3 Vice Chairman, The Walt Disney Company</td>
</tr>
<tr>
<td>Michael D. Eisner</td>
<td>3 Chairman and Chief Executive Officer, The Walt Disney Company</td>
</tr>
<tr>
<td>Stanley P. Gold</td>
<td>4, 5 President and Chief Executive Officer, Showrock Holdings, Inc.</td>
</tr>
<tr>
<td>Sanford M. Litvak</td>
<td>Senior Executive Vice President and Chief of Corporate Operations, The Walt Disney Company</td>
</tr>
<tr>
<td>Ignacio H. Lozano, Jr.</td>
<td>1, 2, 4 Editor-in-Chief, LA Opinion</td>
</tr>
<tr>
<td>George J. Mitchell</td>
<td>5 Special Counsel, Verner, Liipfert, Berned, McFerren &amp; Hand</td>
</tr>
<tr>
<td>Thomas S. Murphy</td>
<td>Former Chairman, Capital Cities/ASC, Inc.</td>
</tr>
<tr>
<td>Richard A. Nunis</td>
<td>Chairman, Walt Disney Attractions</td>
</tr>
<tr>
<td>Leo J. O'Donnovan, S.J.</td>
<td>President, Georgetown University</td>
</tr>
<tr>
<td>Michael S. Ovitz</td>
<td>3 President, The Walt Disney Company</td>
</tr>
<tr>
<td>Sidney Poitier</td>
<td>2, 4 Chief Executive Officer, Verdon-Cedric Productions</td>
</tr>
<tr>
<td>Irwin E. Russell</td>
<td>2, 4 Attorney at Law</td>
</tr>
<tr>
<td>Robert A. M. Stem</td>
<td>5 Senior Partner Productions</td>
</tr>
<tr>
<td>E. Cardon Walker</td>
<td>1 Former Chairman and Chief Executive Officer, The Walt Disney Company</td>
</tr>
<tr>
<td>Raymond L. Watson</td>
<td>1, 2, 3 Vice Chairman, The Irvine Company</td>
</tr>
<tr>
<td>Gary L. Wilson</td>
<td>5 Co-Chairman, Northwest Airlines Corporation</td>
</tr>
</tbody>
</table>

1. Member of Audit Review Committee  
2. Member of Compensation Committee  
3. Member of Executive Committee  
4. Member of Executive Performance Plan Committee  
5. Member of Nominating Committee
## A Contrast: Disney vs. Campbell Soup

<table>
<thead>
<tr>
<th><strong>BEST PRACTICES</strong></th>
<th><strong>CAMPBELL SOUP</strong></th>
<th><strong>DISNEY</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority of outside directors</td>
<td>Only one insider</td>
<td>7 of 17 members</td>
</tr>
<tr>
<td></td>
<td>among 15 directors</td>
<td>are insiders</td>
</tr>
<tr>
<td>Bans insiders on nominating committee</td>
<td>Yes</td>
<td>No: CEO is chairman of panel</td>
</tr>
<tr>
<td>Bans former execs from board</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Mandatory retirement age</td>
<td>70, with none over 64</td>
<td>None</td>
</tr>
<tr>
<td>Outside directors meet w/o CEO</td>
<td>Annually</td>
<td>Never</td>
</tr>
<tr>
<td>Appointment of 'lead director''</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Governance committee</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Self-evaluation of effectiveness</td>
<td>Every two years</td>
<td>None</td>
</tr>
<tr>
<td>Director pensions</td>
<td>None</td>
<td>Yes</td>
</tr>
<tr>
<td>Share-ownership requirement</td>
<td>3,000 shares</td>
<td>None</td>
</tr>
</tbody>
</table>
So what next? When the cat is idle, the mice will play ....

- When managers do not fear stockholders, they will often put their interests over stockholder interests
  - Greenmail
  - Golden Parachutes
  - Poison Pills
  - Shark Repellents
  - Overpaying on takeovers
What is Greenmail?

- Greenmail refers to the scenario where a target of a hostile takeover buys out the potential acquirer's existing stake, generally at a price much greater than the price paid by the raider, in return for the signing of a 'standstill' agreement.

- There are at least two negative consequences for existing stockholders.
  - the cash payment by the managers makes the firm poorer.
  - the payment of greenmail reduces the likelihood of a takeover, which would have raised the stock price of the firm.
## The Stock Price Consequences of Greenmail

*Stock Price Changes for firms paying Greenmail*

<table>
<thead>
<tr>
<th>Target Firm</th>
<th>Greenmail Date</th>
<th>% Change in prices in following month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stock</td>
</tr>
<tr>
<td>Phillips Petroleum</td>
<td>3/4/85</td>
<td>-22.60%</td>
</tr>
<tr>
<td>Patrick Industries</td>
<td>8/5/85</td>
<td>-7.1%</td>
</tr>
<tr>
<td>Maynard Oil</td>
<td>10/28/85</td>
<td>19.6%</td>
</tr>
<tr>
<td>Viacom International</td>
<td>5/22/86</td>
<td>-3.8%</td>
</tr>
<tr>
<td>Enron</td>
<td>10/20/86</td>
<td>-13.3%</td>
</tr>
<tr>
<td>CPC International</td>
<td>11/5/86</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Goodyear Tire &amp; Rubber</td>
<td>11/20/86</td>
<td>-11.8%</td>
</tr>
<tr>
<td>Gillette</td>
<td>11/24/86</td>
<td>-25.7%</td>
</tr>
<tr>
<td>United States Gypsum</td>
<td>12/4/86</td>
<td>-10.7%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td>-12.8%</td>
</tr>
</tbody>
</table>
Golden Parachutes

- Golden parachutes refers to provisions in employment contracts, that allows for the payment of a lump-sum or cash flows over a period, if the managers covered by these contracts lose their jobs in a takeover.

- By the mid-eighties, almost 25% of the firms in the Fortune 500 had incorporated golden parachutes into top management compensation contracts.
  - Examples of excesses: The payment of $23.5 million to six officers at Beatrice in connection with the leveraged buyout in 1985, and $35 million to the CEO of Revlon, can be considered to be examples of these excesses.
Poison Pills

- A security, the rights or cashflows on which are triggered by an outside event, generally a hostile takeover, is called a poison pill.
  - For instance, in a flip-over rights plan, shareholders receive rights to acquire shares in their firm at an exercise price well above the current price. In the event of a takeover, the rights 'flip over' to allow shareholders to buy the acquirers' stock at an exercise price well below the market price.

- Poison pills are generally adopted by the board of directors and do not require stockholder approval.
Shark Repellents (Anti-takeover Amendments)

- Anti-takeover amendments have the same objective as greenmail and poison pills, i.e., dissuading hostile takeovers, but differ on one very important count. They require the assent of stockholders to be instituted.

- There are several types of anti-takeover amendments, all designed with the objective of reducing the likelihood of a hostile takeover. Among them are
  - super majority requirements
  - fair-price amendments (where the offer price has to exceed a price specified relative to earnings)
  - staggered elections to boards of directors
  - authorizations to create new classes of securities with special voting rights to dilute the acquirers' holdings.
Overpaying on takeovers

- The quickest and perhaps the most decisive way to impoverish stockholders is to overpay on a takeover.
- The stockholders in acquiring firms do not seem to share the enthusiasm of the managers in these firms. Stock prices of bidding firms decline on the takeover announcements a significant proportion of the time.
- Many mergers do not work, as evidenced by a number of measures.
  - The profitability of merged firms relative to their peer groups, does not increase significantly after mergers.
  - An even more damning indictment is that a large number of mergers are reversed within a few years, which is a clear admission that the acquisitions did not work.
A Case Study: Kodak - Sterling Drugs

- Eastman Kodak’s Great Victory

---

**KODAK’S PRICE REACTION**
Announces bid on 1-22-88

Kodak’s market reaction indicates that investors expected no synergies:
- Kodak’s bid = $5.1 billion
- Sterling’s market value 30 days prior to announcement = $3.0 billion
- Premium bid = $2.1 billion
- Decrease in Kodak’s market value = $2.2 billion

Source: The Alcar Group, Inc.
Earnings and Revenues at Sterling Drugs

Sterling Drug under Eastman Kodak: Where is the synergy?

- Revenue
- Operating Earnings
Kodak Says Drug Unit Is Not for Sale
(NYTimes, 8/93)

- Eastman Kodak officials say they have no plans to sell Kodak’s Sterling Winthrop drug unit.
- Louis Mattis, Chairman of Sterling Winthrop, dismissed the rumors as “massive speculation, which flies in the face of the stated intent of Kodak that it is committed to be in the health business.”
Sanofi to get part of Kodak Drug Unit (6/94)

Taking a long stride on its way out of the drug business, Eastman Kodak said yesterday that the Sanofi Group, a French pharmaceutical company, had agreed to buy the prescription drug business of Sterling Winthrop, a Kodak subsidiary, for $1.68 billion.

– Shares of Eastman Kodak rose 75 cents yesterday, closing at $47.50 on the New York Stock Exchange.
– Samuel D. Isaly an analyst, said the announcement was “very good for Sanofi and very good for Kodak.”
– “When the divestitures are complete, Kodak will be entirely focused on imaging,” said George M. C. Fisher, the company's chairman and chief executive.
Smithkline to buy Kodak’s Drug Business for $2.9 billion

- Smithkline Beecham agreed to buy Eastman Kodak’s Sterling Winthrop Inc. for $2.9 billion.
- For Kodak, the sale almost completes a restructuring intended to refocus the company on its photography business.
- Kodak’s stock price rose $1.25 to $50.625, the highest price since December.
II. Stockholders' objectives vs. Bondholders' objectives

- In theory: there is no conflict of interests between stockholders and bondholders.
- In practice: Stockholders may maximize their wealth at the expense of bondholders.
  - Increasing leverage dramatically
  - Increasing dividends significantly
  - Taking riskier projects than those agreed to
1. Increasing leverage dramatically and making existing bonds less valuable

RJR Nabisco’s Bonds Sink Following Announcement of the Leveraged Buyout

RJR Nabisco 30-year bond (8¾%, due 2016)
2. Increasing dividends significantly

EXCESS RETURNS ON STRAIGHT BONDS AROUND DIVIDEND CHANGES

Day (0: Announcement date)
3. Taking projects which are significantly riskier than those the bondholder assumed that you were going to take.

- Bondholders base the interest rate they charge on the perceived risk of the firm's projects.
- If the firm takes on riskier projects, they will lose.
III. Firms and Financial Markets

- **In theory:** Financial markets are efficient. Managers convey information honestly and truthfully to financial markets, and financial markets make reasoned judgments of 'true value'. As a consequence:
  - A company that takes on good long term projects will be rewarded.
  - Short term accounting gimmicks will not lead to increases in market value.
  - Stock price performance is a good measure of management performance.

- **In practice:** There are some holes in the 'Efficient Markets' assumption.
Is Information Unbiased?

- The information revealed by companies about themselves is usually
  - honest and truthful
  - biased
  - fraudulent
1. Managers control the release of information to the general public

- There is evidence that
  - they suppress information, generally negative information
  - they delay the releasing of bad news
    - bad earnings reports
    - other news
  - they sometimes reveal fraudulent information
Evidence that managers delay bad news.

DO MANAGERS DELAY BAD NEWS?: EPS and DPS Changes - by Weekday

% Chg(EPS)  % Chg(DPS)

Monday  Tuesday  Wednesday  Thursday  Friday
2. Even when information is revealed to financial markets, the market value that is set by demand and supply may contain errors.

- Prices are much more volatile than justified by the underlying fundamentals
  - Eg. Did the true value of equities really decline by 20% on October 19, 1987?

- Financial markets overreact to news, both good and bad

- Financial markets are short-sighted, and do not consider the long-term implications of actions taken by the firm
  - Eg. the focus on next quarter's earnings

- Financial markets are manipulated by insiders; Prices do not have any relationship to value.
Are Markets Short term?

2. Focusing on market prices will lead companies towards short term decisions at the expense of long term value.

- I agree with the statement
- I do not agree with this statement
Are Markets Short Sighted? Some evidence that they are not.

- There are hundreds of start-up and small firms, with no earnings expected in the near future, that raise money on financial markets.

- If the evidence suggests anything, it is that markets do not value current earnings and cashflows enough and value future earnings and cashflows too much.
  - Low PE stocks are underpriced relative to high PE stocks.

- The market response to research and development and investment expenditure is generally positive.
## Market Reaction to Investment Announcements

<table>
<thead>
<tr>
<th>Type of Announcement</th>
<th>Abnormal Returns on Announcement Day</th>
<th>Announcement Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Venture Formations</td>
<td>0.399%</td>
<td>1.412%</td>
</tr>
<tr>
<td>R&amp;D Expenditures</td>
<td>0.251%</td>
<td>1.456%</td>
</tr>
<tr>
<td>Product Strategies</td>
<td>0.440%</td>
<td>-0.35%</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>0.290%</td>
<td>1.499%</td>
</tr>
<tr>
<td>All Announcements</td>
<td>0.355%</td>
<td>0.984%</td>
</tr>
</tbody>
</table>
In theory: There are no costs associated with the firm that cannot be traced to the firm and charged to it.

In practice: Financial decisions can create social costs and benefits.

- A social cost or benefit is a cost or benefit that accrues to society as a whole and NOT to the firm making the decision.
  - Environmental costs (pollution, health costs, etc.)
  - Quality of Life' costs (traffic, housing, safety, etc.)
- Examples of social benefits include:
  - creating employment in areas with high unemployment
  - supporting development in inner cities
  - creating access to goods in areas where such access does not exist
Social Costs and Benefits are difficult to quantify because ..

- they might not be known at the time of the decision (Example: Manville and asbestos)
- they are 'person-specific' (different decision makers weight them differently)
- they can be paralyzing if carried to extremes
A Hypothetical Example

Assume that you work for Disney and that you have an opportunity to open a store in an inner-city neighborhood. The store is expected to lose about $100,000 a year, but it will create much-needed employment in the area, and may help revitalize it.

Questions:
- Would you open the store?
- If yes, would you tell your stockholders? Would you let them vote on the issue?
- If no, how would you respond to a stockholder query on why you were not living up to your social responsibilities?
So this is what can go wrong?

**STOCKHOLDERS**
- Managers put their interests above stockholders
- Have little control over managers

**BONDHOLDERS**
- Lend Money
- Bondholders can get ripped off

**Managers**
- Delay bad news or provide misleading information

**FINANCIAL MARKETS**

**SOCIETY**
- Significant Social Costs
- Some costs cannot be traced to firm
- Markets make mistakes and can over react
Traditional corporate financial theory breaks down when ... 

- The interests/objectives of the decision makers in the firm conflict with the interests of stockholders.
- Financial markets do not operate efficiently, and stock prices do not reflect the underlying value of the firm.
- Significant social costs can be created as a by-product of stock price maximization.
When traditional corporate financial theory breaks down, the solution is:

- To choose a different mechanism for corporate governance
- To choose a different objective:
- To maximize stock price, but reduce the potential for conflict and breakdown:
  - Making managers (decision makers) and employees into stockholders
  - By providing information honestly and promptly to financial markets
An Alternative Corporate Governance System

- Germany and Japan developed a different mechanism for corporate governance, based upon corporate cross holdings.
  - In Germany, the banks form the core of this system.
  - In Japan, it is the keiretsus
  - Other Asian countries have modeled their system after Japan, with family companies forming the core of the new corporate families

- At their best, the most efficient firms in the group work at bringing the less efficient firms up to par. They provide a corporate welfare system that makes for a more stable corporate structure

- At their worst, the least efficient and poorly run firms in the group pull down the most efficient and best run firms down. The nature of the cross holdings makes it very difficult for outsiders (including investors in these firms) to figure out how well or badly the group is doing.
The Porter Alternative

- Michael Porter, in his ode to the Japanese system in the 1980s, argued that the Japanese system was superior to the U.S. system because it allowed managers to be long term in their decision making, whereas the focus on stock prices made U.S. firms short term. Implicitly he is assuming that
  - Managers are smarter than stock holders
  - Market prices tend to be based on short term earnings rather than long term value
  - Managers have the long term interests of the firm in mind and are rewarded based upon the long term health and success of their companies
  - All of the above
Choose a Different Objective Function

- Firms can always focus on a different objective function. Examples would include
  - maximizing earnings
  - maximizing revenues
  - maximizing firm size
  - maximizing market share
  - maximizing EVA
- The key thing to remember is that these are intermediate objective functions.
  - To the degree that they are correlated with the long term health and value of the company, they work well.
  - To the degree that they do not, the firm can end up with a disaster
Maximize Stock Price, subject to ..

- The strength of the stock price maximization objective function is its internal self correction mechanism. Excesses on any of the linkages lead, if unregulated, to counter actions which reduce or eliminate these excesses.
- In the context of our discussion,
  - managers taking advantage of stockholders has lead to a much more active market for corporate control.
  - stockholders taking advantage of bondholders has lead to bondholders protecting themselves at the time of the issue.
  - firms revealing incorrect or delayed information to markets has lead to markets becoming more “skeptical” and “punitive”
  - firms creating social costs has lead to more regulations, as well as investor and customer backlashes.
The Stockholder Backlash

- Investors such as CalPERS and the Lens Funds have become much more active in monitoring companies that they invest in and demanding changes in the way in which business is done.

- Individuals like Michael Price specialize in taking large positions in companies which they feel need to change their ways (Chase, Dow Jones, Readers’ Digest) and push for change.

- At annual meetings, stockholders have taken to expressing their displeasure with incumbent management by voting against their compensation contracts or their board of directors.
The Hostile Acquisition Threat

- The typical target firm in a hostile takeover has
  - a return on equity almost 5% lower than its peer group
  - had a stock that has significantly under performed the peer group over the previous 2 years
  - has managers who hold little or no stock in the firm

- In other words, the best defense against a hostile takeover is to run your firm well and earn good returns for your stockholders

- Conversely, when you do not allow hostile takeovers, this is the firm that you are most likely protecting (and not a well run or well managed firm)
The Bondholders’ Defense Against Stockholder Excesses

- More restrictive covenants on investment, financing and dividend policy have been incorporated into both private lending agreements and into bond issues, to prevent future “Nabiscos”.

- New types of bonds have been created to explicitly protect bondholders against sudden increases in leverage or other actions that increase lender risk substantially. Two examples of such bonds
  - Puttable Bonds, where the bondholder can put the bond back to the firm and get face value, if the firm takes actions that hurt bondholders
  - Ratings Sensitive Notes, where the interest rate on the notes adjusts to that appropriate for the rating of the firm

- More hybrid bonds (with an equity component, usually in the form of a conversion option or warrant) have been used. This allows bondholders to become equity investors, if they feel it is in their best interests to do so.
The Financial Market Response

- While analysts are more likely still to issue buy rather than sell recommendations, the payoff to uncovering negative news about a firm is large enough that such news is eagerly sought and quickly revealed (at least to a limited group of investors).
- As information sources to the average investor proliferate, it is becoming much more difficult for firms to control when and how information gets out to markets.
- As option trading has become more common, it has become much easier to trade on bad news. In the process, it is revealed to the rest of the market (See Scholastic).
- When firms mislead markets, the punishment is not only quick but it is savage.
The Societal Response

- If firms consistently flout societal norms and create large social costs, the governmental response (especially in a democracy) is for laws and regulations to be passed against such behavior.
  - e.g.: Laws against using underage labor in the United States

- For firms catering to a more socially conscious clientele, the failure to meet societal norms (even if it is legal) can lead to loss of business and value.
  - e.g. Specialty retailers being criticized for using underage labor in other countries (where it might be legal)

- Finally, investors may choose not to invest in stocks of firms that they view as social outcasts.
  - e.g.: Tobacco firms and the growth of “socially responsible” funds (Calvert..)
The Counter Reaction

**STOCKHOLDERS**
1. More activist investors
2. Hostile takeovers

Managers of poorly run firms are put on notice.

**BONDHOLDERS**
1. Covenants
2. New Types

Protect themselves

**MANAGERS**

**FINANCIAL MARKETS**
Firms are punished for misleading markets

**SOCIETY**
Corporate Good Citizen Constraints
1. More laws
2. Investor/Customer Backlash

Investors and analysts become more skeptical
So what do you think?

- At this point in time, the following statement best describes where I stand in terms of the right objective function for decision making in a business
  - Maximize stock price or stockholder wealth, with no constraints
  - Maximize stock price or stockholder wealth, with constraints on being a good social citizen.
  - Maximize profits or profitability
  - Maximize market share
  - Maximize Revenues
  - Maximize social good
  - None of the above