

When traditional corporate financial theory breaks down, the solution is:

- To choose a different mechanism for corporate governance, i.e., assign the responsibility for monitoring managers to someone other than stockholders.
- To choose a different objective for the firm.
- To maximize stock price, but reduce the potential for conflict and breakdown:
 - ▣ Making managers (decision makers) and employees into stockholders
 - ▣ Protect lenders from expropriation
 - ▣ By providing information honestly and promptly to financial markets
 - ▣ Minimize social costs

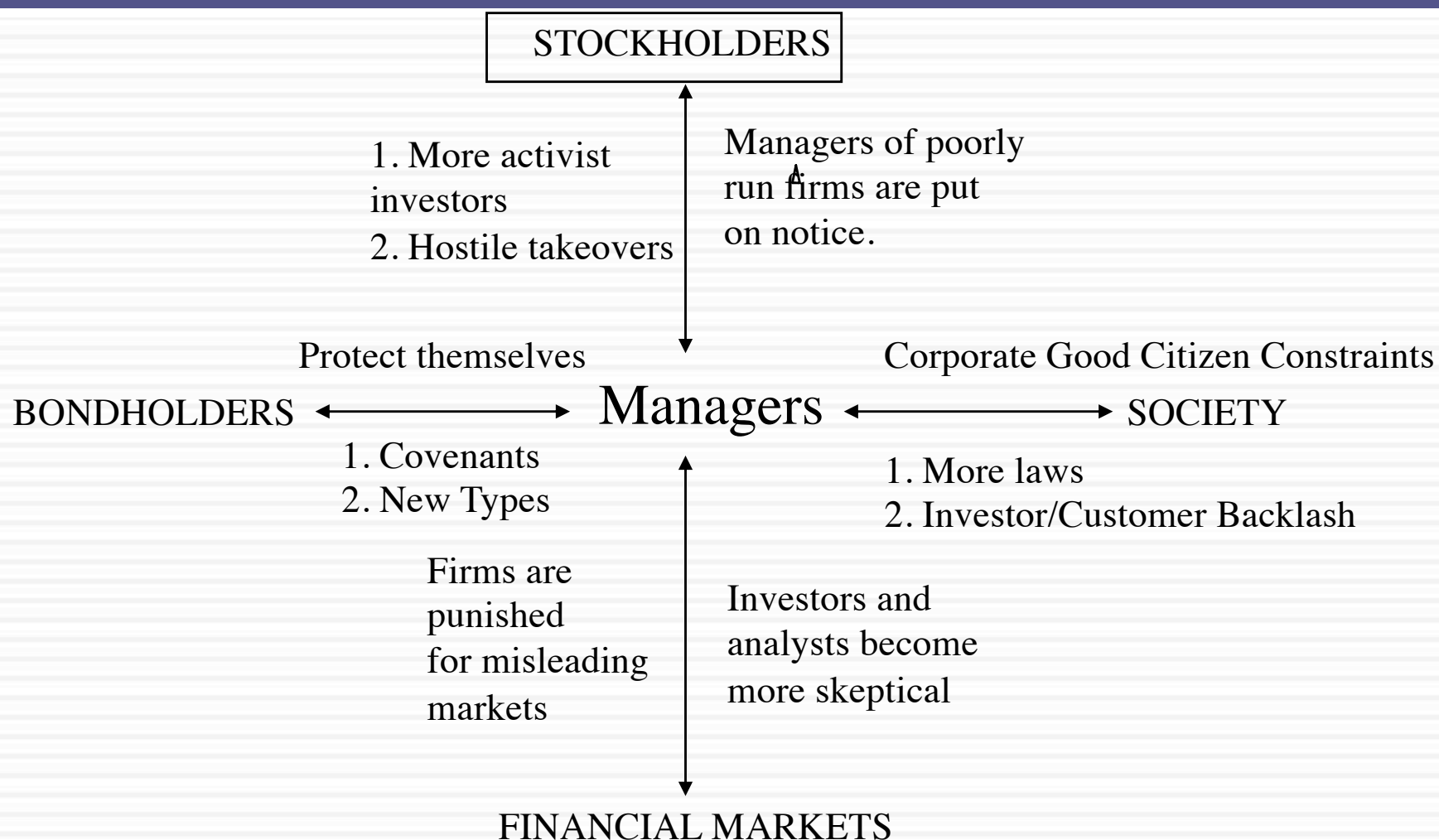
I. An Alternative Corporate Governance System

- 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.

II. 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

III. A Market Based Solution



Disney: Eisner's rise & fall from grace

- ❑ In his early years at Disney, Michael Eisner brought about long-delayed changes in the company and put it on the path to being an entertainment giant that it is today. His success allowed him to consolidate power and the boards that he created were increasingly captive ones (see the 1997 board).
- ❑ In 1996, Eisner spearheaded the push to buy ABC and the board rubberstamped his decision, as they had with other major decisions. In the years following, the company ran into problems both on its ABC acquisition and on its other operations and stockholders started to get restive, especially as the stock price halved between 1998 and 2002.
- ❑ In 2003, Roy Disney and Stanley Gold resigned from the Disney board, arguing against Eisner's autocratic style.
- ❑ In early 2004, Comcast made a hostile bid for Disney and later in the year, 43% of Disney shareholders withheld their votes for Eisner's reelection to the board of directors. Following that vote, the board of directors at Disney voted unanimously to elect George Mitchell as the Chair of the board, replacing Eisner, who vowed to stay on as CEO.
- ❑ In October 2005, Eisner stepped down as CEO, to be replaced by Bob Iger.

A Market Solution: Eisner's exit... and a new age dawns? Disney's board in 2008

<i>Board Members</i>	<i>Occupation</i>
John E. Pepper, Jr. (Chairman)	Retired Chairman and CEO, Procter & Gamble Co.
Susan E. Arnold	President, Global Business Units, Procter & Gamble Co.
John E. Bryson	Retired Chairman and CEO, Edison International
John S. Chen	Chairman,, CEO & President, Sybase, Inc.
Judith L. Estrin	CEO, J Labs, LLC.
Robert A. Iger	CEO, Disney
Steven P. Jobs	CEO, Apple
Fred Langhammer	Chairman, Global Affairs, The Estee Lauder Companies
Aylwin B. Lewis	President and CEO, Potbelly Sandwich Works
Monica Lozano	Publisher and CEO, La Opinion
Robert W. Matschullat	Retired Vice Chairman and CFO, The Seagram Co.
Orin C. Smith	Retired President and CEO, Starbucks Corporation

But as a CEO's tenure lengthens, does corporate governance suffer?

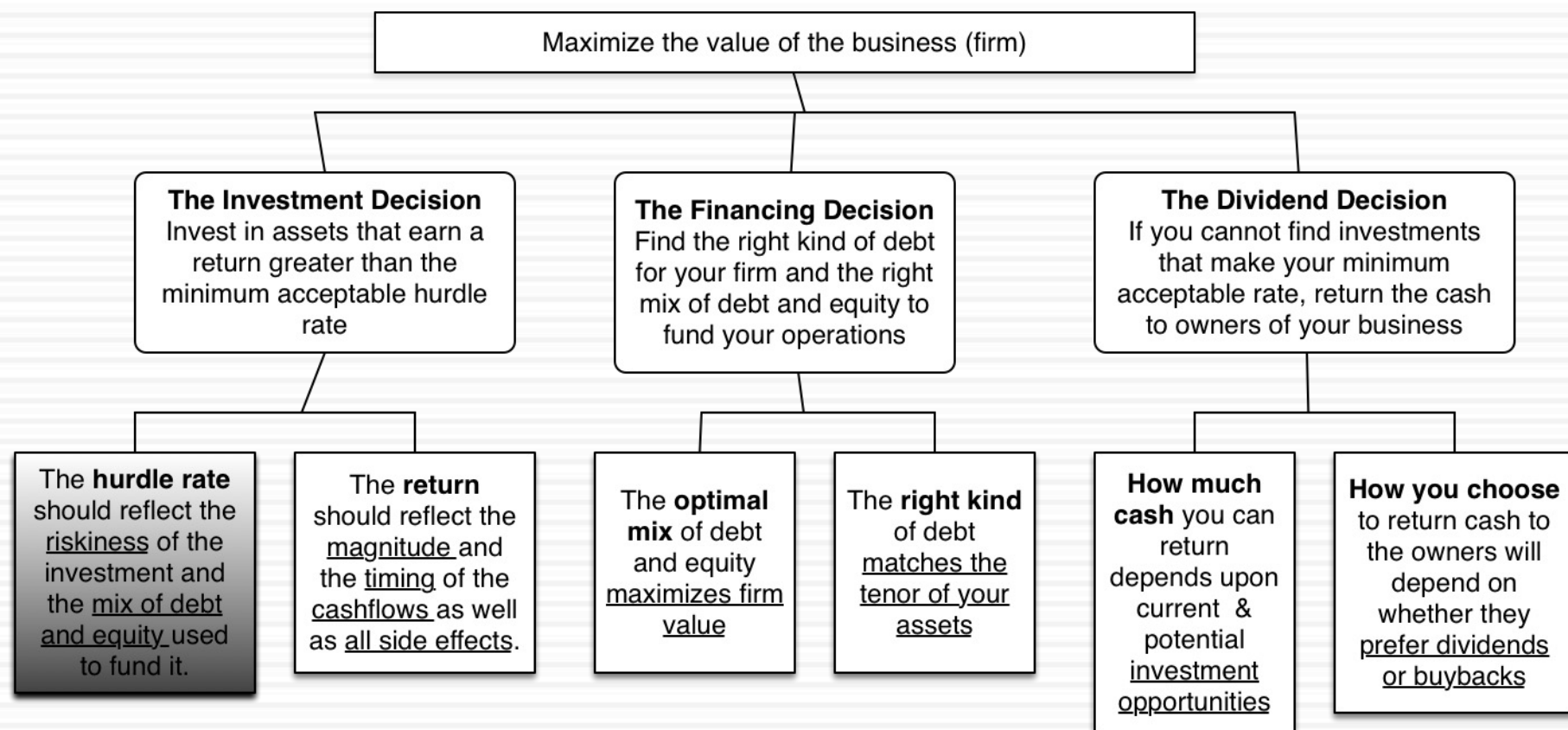
1. While the board size has stayed compact (at twelve members), there has been only one change since 2008, with Sheryl Sandberg, COO of Facebook, replacing the deceased Steve Jobs.
2. The board voted reinstate Iger as chair of the board in 2011, reversing a decision made to separate the CEO and Chair positions after the Eisner years.
3. In 2011, Iger announced his intent to step down as CEO in 2015 but Disney's board convinced Iger to stay on as CEO for an extra year, for the "the good of the company".
4. There were signs of restiveness among Disney's stockholders, especially those interested in corporate governance. Activist investors (CalSTRS) starting making noise and Institutional Shareholder Services (ISS), which gauges corporate governance at companies, raised red flags about compensation and board monitoring at Disney.



THE INVESTMENT PRINCIPLE: RISK AND RETURN MODELS

“You cannot swing upon a rope that is attached only to your own belt.”

First Principles



The notion of a benchmark

- Since financial resources are finite, there is a hurdle that projects have to cross before being deemed acceptable.
- This hurdle will be higher for riskier projects than for safer projects.
- A simple representation of the hurdle rate is as follows:
$$\text{Hurdle rate} = \text{Riskless Rate} + \text{Risk Premium}$$
- The two basic questions that every risk and return model in finance tries to answer are:
 - ▣ How do you measure risk?
 - ▣ How do you translate this risk measure into a risk premium?

What is Risk?

- Risk, in traditional terms, is viewed as a ‘negative’. Webster’s dictionary, for instance, defines risk as “exposing to danger or hazard”. The Chinese symbols for risk, reproduced below, give a much better description of risk:

危机

- The first symbol is the symbol for “danger”, while the second is the symbol for “opportunity”, making risk a mix of danger and opportunity. You cannot have one, without the other.
- Risk is therefore neither good nor bad. It is just a fact of life. The question that businesses have to address is therefore not whether to avoid risk but how best to incorporate it into their decision making.

Alternatives to the CAPM

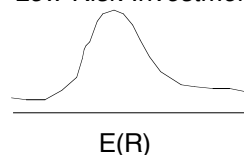
Step 1: Defining Risk

The risk in an investment can be measured by the variance in actual returns around an expected return

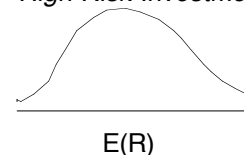
Riskless Investment



Low Risk Investment



High Risk Investment



Step 2: Differentiating between Rewarded and Unrewarded Risk

Risk that is specific to investment (Firm Specific)

- Can be diversified away in a diversified portfolio
- 1. each investment is a small proportion of portfolio
- 2. risk averages out across investments in portfolio

Risk that affects all investments (Market Risk)

- Cannot be diversified away since most assets are affected by it.

The marginal investor is assumed to hold a “diversified” portfolio. Thus, only market risk will be rewarded and priced.

Step 3: Measuring Market Risk

The CAPM	The APM	Multi-Factor Models	Proxy Models
<p>If there is</p> <ol style="list-style-type: none"> 1. no private information 2. no transactions cost <p>the optimal diversified portfolio includes every traded asset. Everyone will hold this <u>market portfolio</u></p> <p>Market Risk = Risk added by any investment to the market portfolio:</p>	<p>If there are no arbitrage opportunities then the market risk of any asset must be captured by betas relative to factors that affect all investments.</p> <p>Market Risk = Risk exposures of any asset to market factors</p>	<p>Since market risk affects most or all investments, it must come from macro economic factors.</p> <p>Market Risk = Risk exposures of any asset to macro economic factors.</p>	<p>In an efficient market, differences in returns across long periods must be due to market risk differences. Looking for variables correlated with returns should then give us proxies for this risk.</p> <p>Market Risk = Captured by the Proxy Variable(s)</p>
Beta of asset relative to Market portfolio (from a regression)	Betas of asset relative to unspecified market factors (from a factor analysis)	Betas of assets relative to specified macro economic factors (from a regression)	Equation relating returns to proxy variables (from a regression)

Limitations of the CAPM

1. The model makes unrealistic assumptions
2. The parameters of the model cannot be estimated precisely
 - Definition of a market index
 - Firm may have changed during the 'estimation' period'
3. The model does not work well
 - If the model is right, there should be a linear relationship between returns and betas
the only variable that should explain returns is betas
 - The reality is that the relationship between betas and returns is weak
Other variables (size, price/book value) seem to explain differences in returns better.

Why the CAPM persists...

- The CAPM, notwithstanding its many critics and limitations, has survived as the default model for risk in equity valuation and corporate finance. The alternative models that have been presented as better models (APM, Multifactor model..) have made inroads in performance evaluation but not in prospective analysis because:
 - The alternative models (which are richer) do a much better job than the CAPM in explaining past return, but their effectiveness drops off when it comes to estimating expected future returns (because the models tend to shift and change).
 - The alternative models are more complicated and require more information than the CAPM.
 - For most companies, the expected returns you get with the the alternative models is not different enough to be worth the extra trouble of estimating four additional betas.

Gauging the marginal investor: Disney in 2013

DIS US Equity 25) Settings 99) Feedback Holdings: Current
Walt Disney Co/The CUSIP 25468710

1) Current 2) Historical 3) Matrix 4) Ownership 5) Transactions 6) Options
Search Name -- 21) Save 22) Delete 3) Saved Search 24) Refine Search
Text Search Holder Group All Holders 20) Export

Holder Name	Portfolio Name	Source	Opt	Amt Held	% Out	Latest Chg	File Dt
		All Sources	All				
1. LAURENE POWELL JOBS TRU	n/a	PROXY		130,844,544	7.32	0	01/07/13
2. BLACKROCK	n/a	ULT-AGG		93,837,994	5.25	-494,298	09/24/13
3. VANGUARD GROUP INC	n/a	ULT-AGG		80,163,479	4.49	1,183,628	06/30/13
4. STATE STREET CORP	n/a	ULT-AGG		77,799,514	4.35	2,893,171	09/24/13
5. CAPITAL GROUP COMPANIES	n/a	ULT-AGG		62,014,410	3.47	36,689,294	06/30/13
6. FMR LLC	n/a	ULT-AGG		59,453,225	3.33	-1,495,596	06/30/13
7. SUN LIFE FINANCIAL INC	n/a	ULT-AGG		55,699,112	3.12	-1,422,694	06/30/13
8. STATE FARM MUTUAL AUTO I	STATE FARM MUTUAL AU	13F		42,206,018	2.36	0	06/30/13
9. LUCAS JR GEORGE W	n/a	Co File		37,076,679	2.08	0	02/06/13
10. BANK OF NEW YORK MELLON	BANK OF NEW YORK MEL	13F		30,293,150	1.70	-127,337	06/30/13
11. NORTHERN TRUST CORPORAT	NORTHERN TRUST CORP	13F		28,465,082	1.59	224,418	06/30/13
12. T ROWE PRICE ASSOCIATES	T ROWE PRICE ASSOCIA	13F		25,834,722	1.45	-3,332,832	06/30/13
13. WELLINGTON MANAGEMENT CO	WELLINGTON MANAGEME	13F		24,292,691	1.36	-4,191,722	06/30/13
14. JENNISON ASSOCIATES LLC	JENNISON ASSOCIATES	13F		16,644,863	0.93	2,408,938	06/30/13
15. JP MORGAN	n/a	ULT-AGG		15,073,679	0.84	1,496,290	06/30/13
16. NORGES BANK	NORGES BANK	13F		14,991,213	0.84	0	12/31/12
17. DAVIS SELECTED ADVISERS L	DAVIS SELECTED ADVISE	13F		12,938,299	0.72	-2,546,616	06/30/13
18. GEODE CAPITAL MANAGEMEN	GEODE CAPITAL MANAGE	13F		12,441,353	0.70	233,702	06/30/13

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Extending the assessment of the investor base

- In all five of the publicly traded companies that we are looking at, institutions are big holders of the company's stock.

	<i>Disney</i>	<i>Deutsche Bank</i>	<i>Vale (preferred)</i>	<i>Tata Motors</i>	<i>Baidu (Class A)</i>
Institutions	70.2%	40.9%	71.2%	44%	70%
Individuals	21.3%	58.9%	27.8%	25%	20%
Insiders	7.5%	0.2%	1.0%	31%*	10%

<i>Company</i>	<i>Largest holder</i>	<i>Number of institutional investors in top ten holdings</i>
Disney	Laurene Jobs (7.3%)	8
Deutsche Bank	Blackrock (4.69%)	10
Vale Preferred	Aberdeen (7.40%)	8
Tata Motors	Tata Sons (26.07%)	7
Baidu (Class A)	Capital Group (12.46%)	10

⌚ Application Test: Who is the marginal investor in your firm?

- Looking at the breakdown of stockholders in your firm, consider whether the marginal investor is
 - ▣ An institutional investor
 - ▣ An individual investor
 - ▣ An insider

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Inputs required to use the CAPM -

- The capital asset pricing model yields the following expected return:
 - ▣ Expected Return = Riskfree Rate + Beta * (Expected Return on the Market Portfolio - Riskfree Rate)
- To use the model we need three inputs:
 - a. The current risk-free rate
 - b. The expected market risk premium (the premium expected for investing in risky assets (market portfolio) over the riskless asset)
 - c. The beta of the asset being analyzed.

I. A Riskfree Rate

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- On a riskfree asset, the actual return is equal to the expected return. Therefore, there is no variance around the expected return.
- For an investment to be riskfree, then, it has to have
 - ▣ No default risk
 - ▣ No reinvestment risk
- 1. Time horizon matters: Thus, the riskfree rates in valuation will depend upon when the cash flow is expected to occur and will vary across time.
- 2. Not all government securities are riskfree: Some governments face default risk and the rates on bonds issued by them will not be riskfree.
- The conventional practice of estimating riskfree rates is to use the government bond rate, with the government being the one that is in control of issuing that currency. **In November 2013**, for instance, the rate on a ten-year US treasury bond (2.75%) is used as the risk free rate in US dollars.