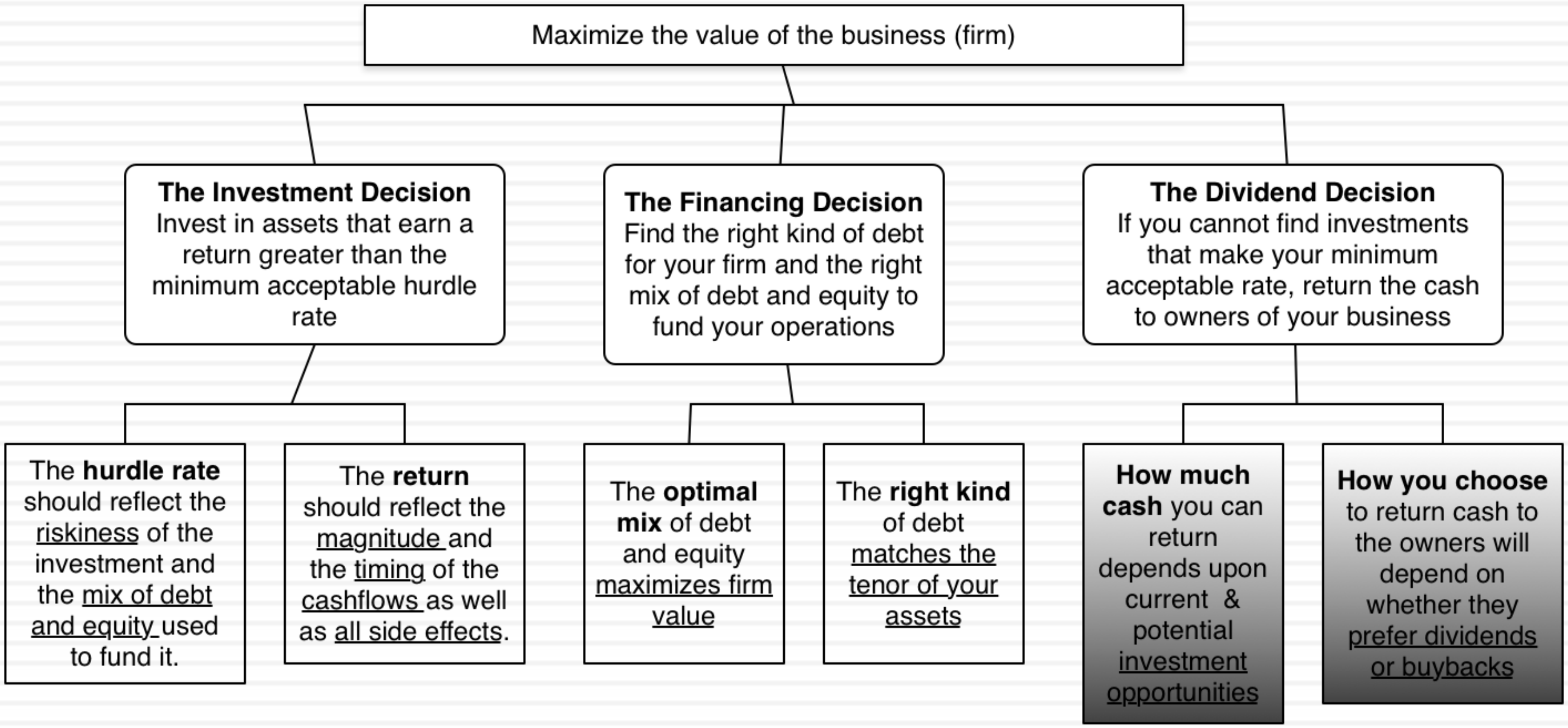
Aswath Damodaran

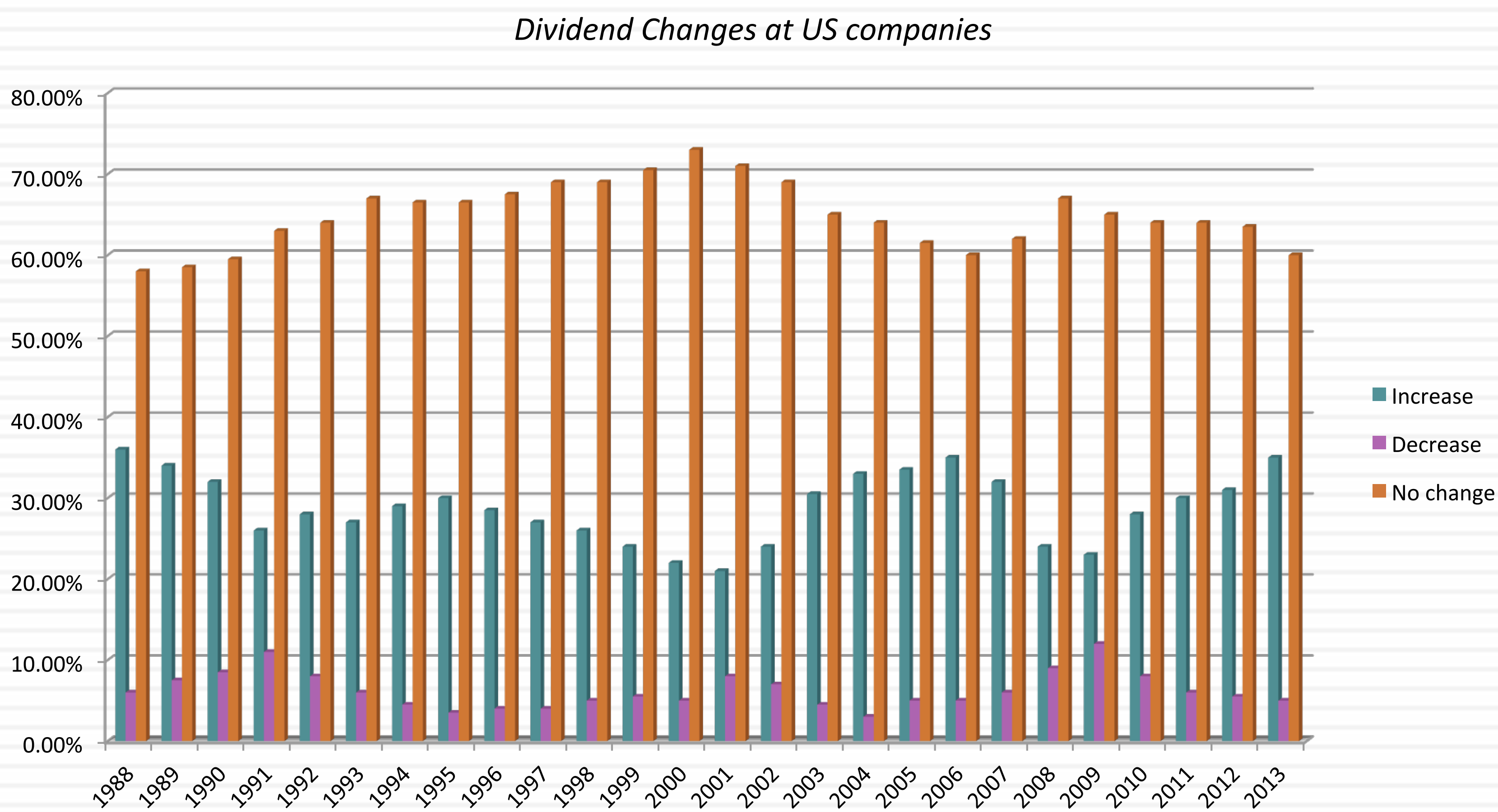
RETURNING CASH TO THE OWNERS: DIVIDEND POLICY

"Companies don't have cash. They hold cash for their stockholders."

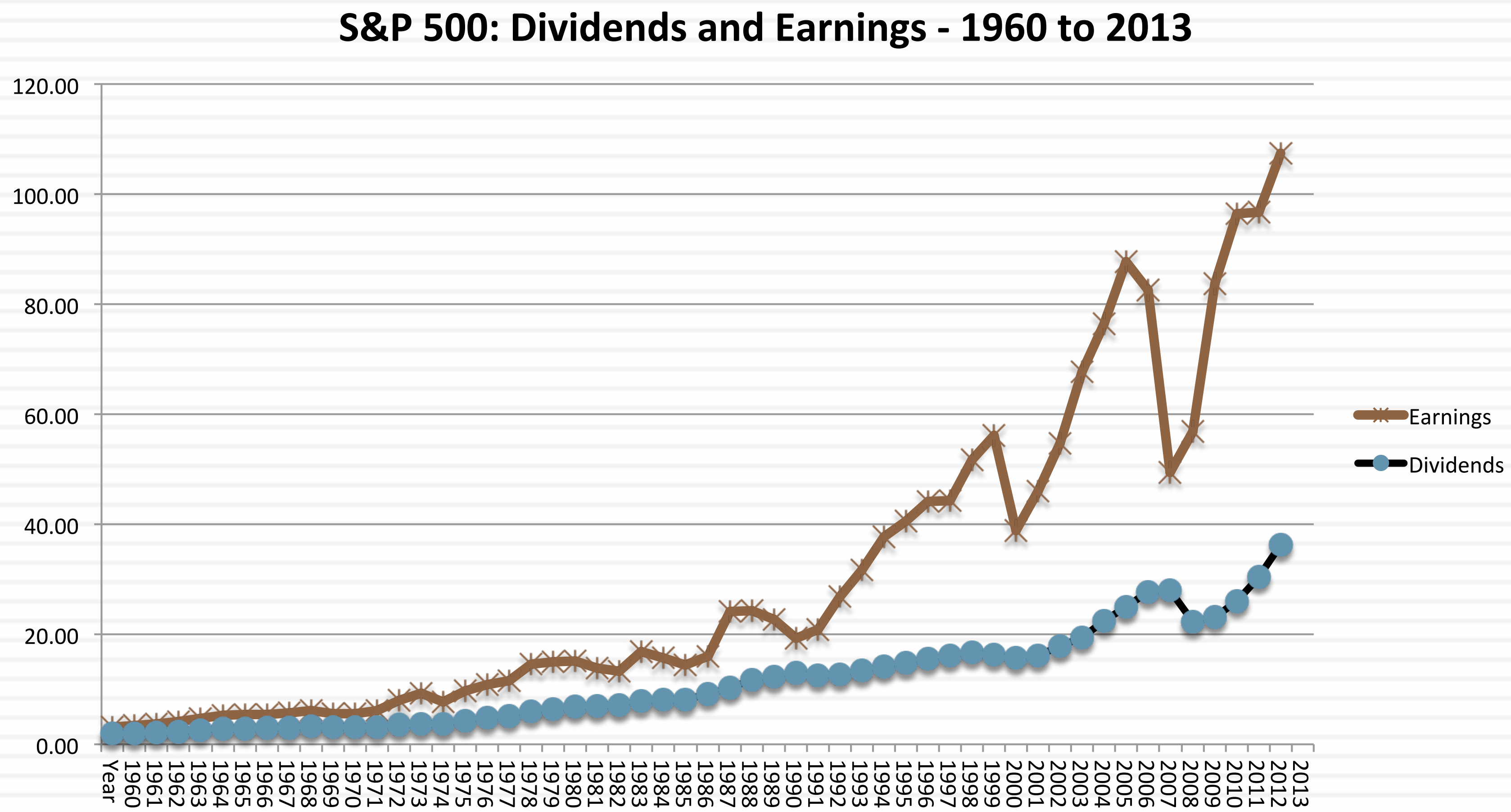
First Principles



I. Dividends are sticky

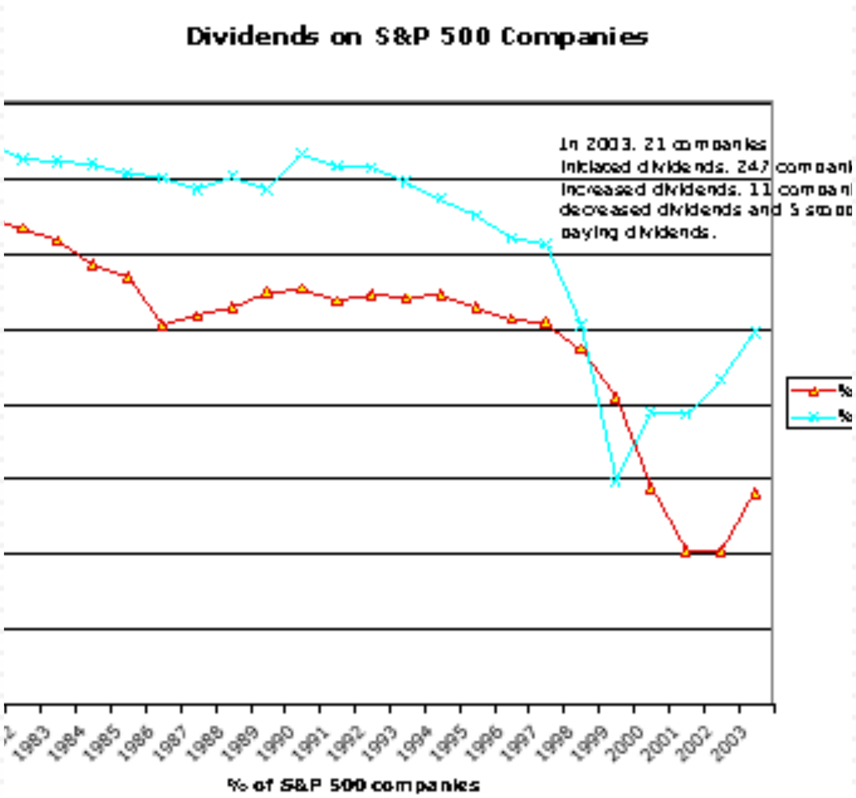


II. Dividends tend to follow earnings



II. Are affected by tax laws…

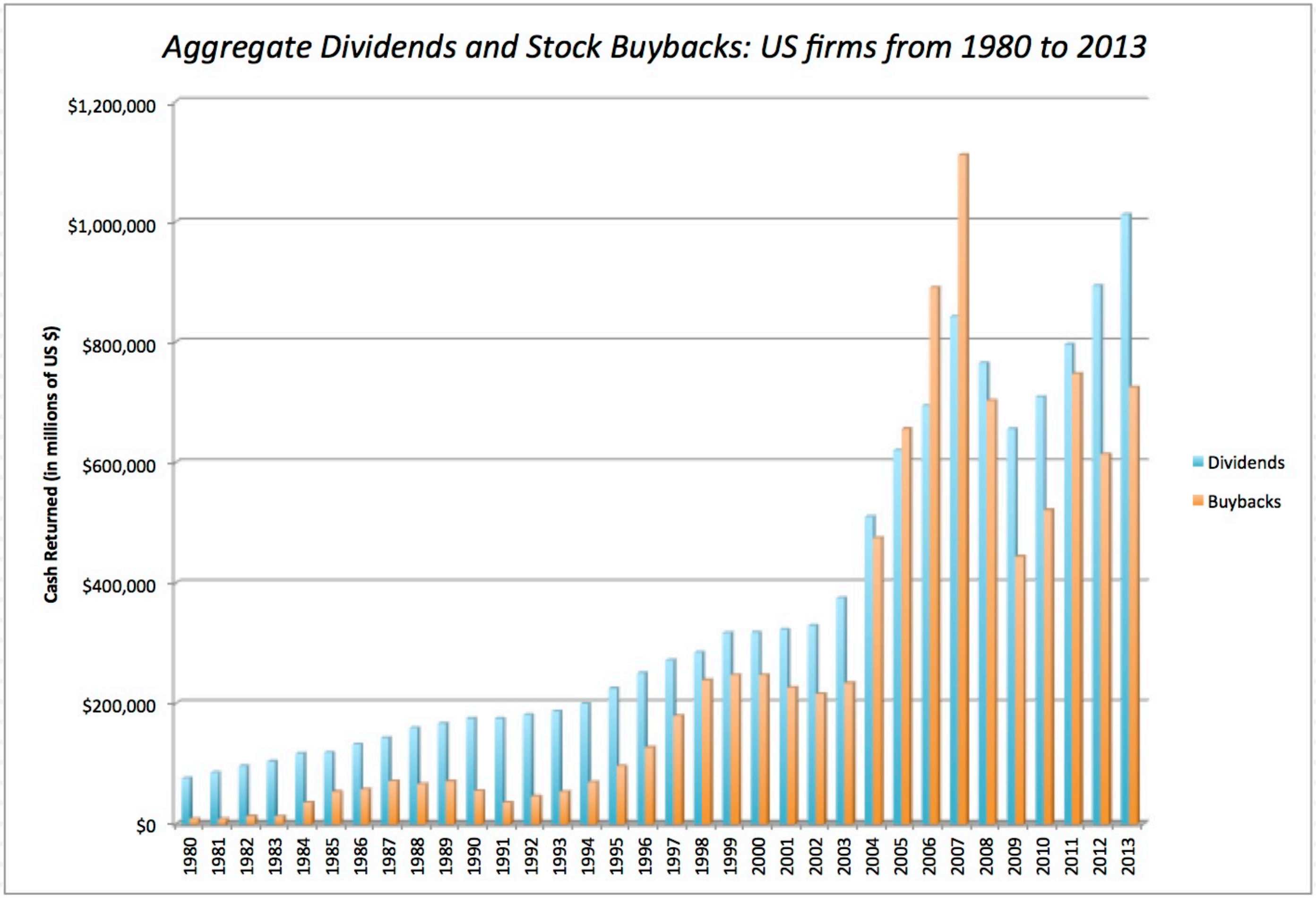
In 2003



In the last quarter of 2012

- As the possibility of tax rates reverting back to pre-2003 levels rose, 233 companies paid out $31 billion in dividends.
- Of these companies, 101 had insider holdings in excess of 20% of the outstanding stock.

IV. More and more firms are buying back stock, rather than pay dividends...

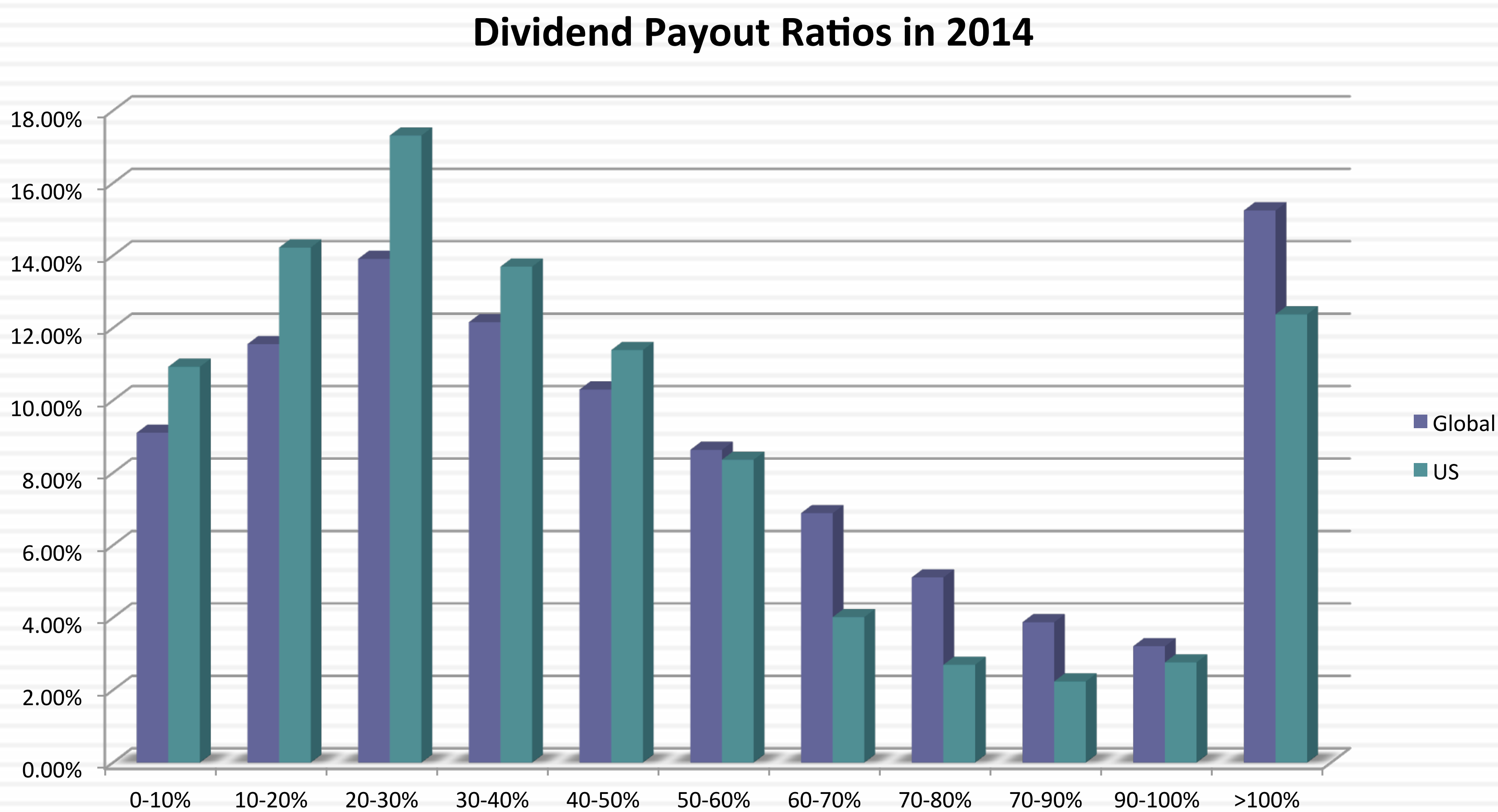


Measures of Dividend Policy

- Dividend Payout = Dividends/ Net Income
  - Measures the percentage of earnings that the company pays in dividends
  - If the net income is negative, the payout ratio cannot be computed.
- Dividend Yield = Dividends per share/ Stock price
  - Measures the return that an investor can make from dividends alone
  - Becomes part of the expected return on the investment.

B DES Page 3
PB Page 41-43

Dividend Payout Ratios



Dividend Yields

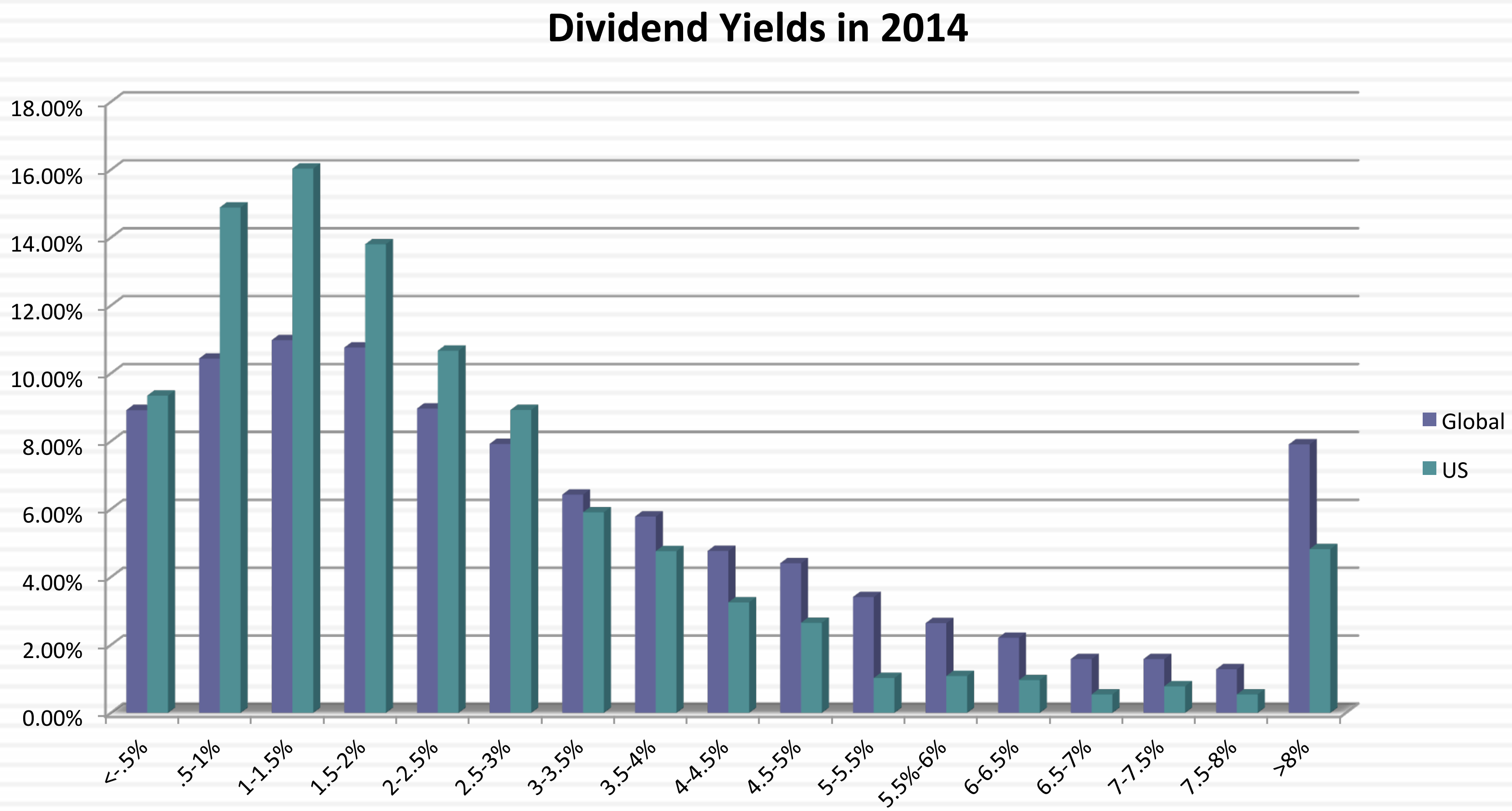
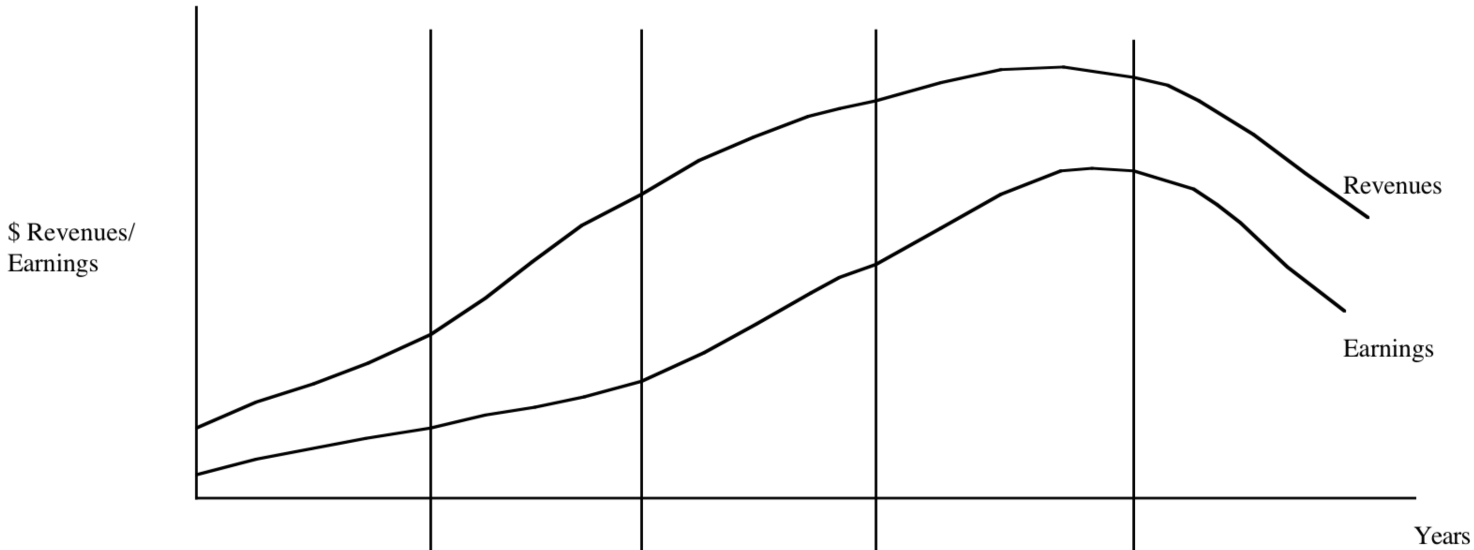


Figure 10.7: Life Cycle Analysis of Dividend Policy



External funding needs	High, but constrained by infrastructure	High, relative to firm value.	Moderates, relative to firm value.	Low, as projects dry up.	Low, as projects dry up.
Internal financing	Negative or low	Negative or low	Low, relative to funding needs	High, relative to funding needs	More than funding needs
Capacity to pay dividends	None	None	Very low	Increasing	High
Growth stage	Stage 1 Start-up	Stage 2 Rapid Expansion	Stage 3 High Growth	Stage 4 Mature Growth	Stage 5 Decline

Years

Dividend Policy: Disney et al.

	Disney	Vale	Tata Motors	Baidu	Deutsche Bank
Dividend Yield - Last 12 months	1.09%	6.56%	1.31%	0.00%	1.96%
Dividend Payout ratio - Last 12 months	21.58%	113.45%	16.09%	0.00%	362.63%
Dividend Yield - 2008-2012	1.17%	4.01%	1.82%	0.00%	3.14%
Dividend Payout - 2008-2012	17.11%	37.69%	15.53%	0.00%	37.39%

Three Schools Of Thought On Dividends

1. If there are no tax disadvantages associated with dividends & companies can issue stock, at no issuance cost, to raise equity, whenever needed

   Dividends do not matter, and dividend policy does not affect value.

2. If dividends create a tax disadvantage for investors (relative to capital gains)

   Dividends are bad, and increasing dividends will reduce value

3. If dividends create a tax advantage for investors (relative to capital gains) and/or stockholders like dividends

   Dividends are good, and increasing dividends will increase value

The balanced viewpoint

- If a company has excess cash, and few good investment opportunities (NPV>0), returning money to stockholders (dividends or stock repurchases) is good.
- If a company does not have excess cash, and/or has several good investment opportunities (NPV>0), returning money to stockholders (dividends or stock repurchases) is bad.

Assessing Dividend Policy

- Approach 1: The Cash/Trust Nexus
  - Assess how much cash a firm has available to pay in dividends, relative what it returns to stockholders. Evaluate whether you can trust the managers of the company as custodians of your cash.
- Approach 2: Peer Group Analysis
  - Pick a dividend policy for your company that makes it comparable to other firms in its peer group.

I. The Cash/Trust Assessment

- Step 1: How much could the company have paid out during the period under question?
- Step 2: How much did the the company actually pay out during the period in question?
- Step 3: How much do I trust the management of this company with excess cash?
  - How well did they make investments during the period in question?
  - How well has my stock performed during the period in question?

How much has the company returned to stockholders?

- As firms increasing use stock buybacks, we have to measure cash returned to stockholders as not only dividends but also buybacks.
- For instance, for the companies we are analyzing the cash returned looked as follows.

	Disney		*Vale*		*Tata Motors*		*Baidu*		*Deutsche Bank*	
Year	Dividends	Buybacks	Dividends	Buybacks	Dividends	Buybacks	Dividends	Buybacks	Dividends	Buybacks
2008	$648	$648	$2,993	$741	7,595₹	0₹	¥0	¥0	2,274 €	0 €
2009	$653	$2,669	$2,771	$9	3,496₹	0₹	¥0	¥0	309 €	0 €
2010	$756	$4,993	$3,037	$1,930	10,195₹	0₹	¥0	¥0	465 €	0 €
2011	$1,076	$3,015	$9,062	$3,051	15,031₹	0₹	¥0	¥0	691 €	0 €
2012	$1,324	$4,087	$6,006	$0	15,088₹	970₹	¥0	¥0	689 €	0 €
2008-12	**$4,457**	**$15,412**	**$23,869**	**$5,731**	**51,405₹**	**970₹**	**¥0**	**¥0**	**¥4,428**	**¥0**

A Measure of How Much a Company Could have Afforded to Pay out: FCFE

- The Free Cashflow to Equity (FCFE) is a measure of how much cash is left in the business after non-equity claimholders (debt and preferred stock) have been paid, and after any reinvestment needed to sustain the firm's assets and future growth.

Net Income

+ Depreciation & Amortization

= Cash flows from Operations to Equity Investors

- Preferred Dividends

- Capital Expenditures

- Working Capital Needs

- Principal Repayments

+ Proceeds from New Debt Issues

= Free Cash flow to Equity

Disney's FCFE: 2008 – 2012

	2012	2011	2010	2009	2008	Aggregate
Net Income	$6,136	$5,682	$4,807	$3,963	$3,307	$23,895
- (Cap. Exp - Depr)	$604	$1,797	$1,718	$397	$122	$4,638
- ∂ Working Capital	($133)	$940	$950	$308	($109)	$1,956
Free CF to Equity (pre-debt)	$5,665	$2,945	$2,139	$3,258	$3,294	$17,301
+ Net Debt Issued	$1,881	$4,246	$2,743	$1,190	($235)	$9,825
= Free CF to Equity (actual debt)	$7,546	$7,191	$4,882	$4,448	$3,059	$27,126
Free CF to Equity (target debt ratio)	$5,720	$3,262	$2,448	$3,340	$3,296	$18,065
Dividends	$1,324	$1,076	$756	$653	$648	$4,457
Dividends + Buybacks	$5,411	$4,091	$5,749	$3,322	$1,296	$19,869

Disney returned about $1.5 billion more than the $18.1 billion it had available as FCFE with a normalized debt ratio of 11.58% (its current debt ratio).

FCFE for a Bank?

- We redefine reinvestment as investment in regulatory capital.

  $FCFE_{Bank}$= Net Income – Increase in Regulatory Capital (Book Equity)

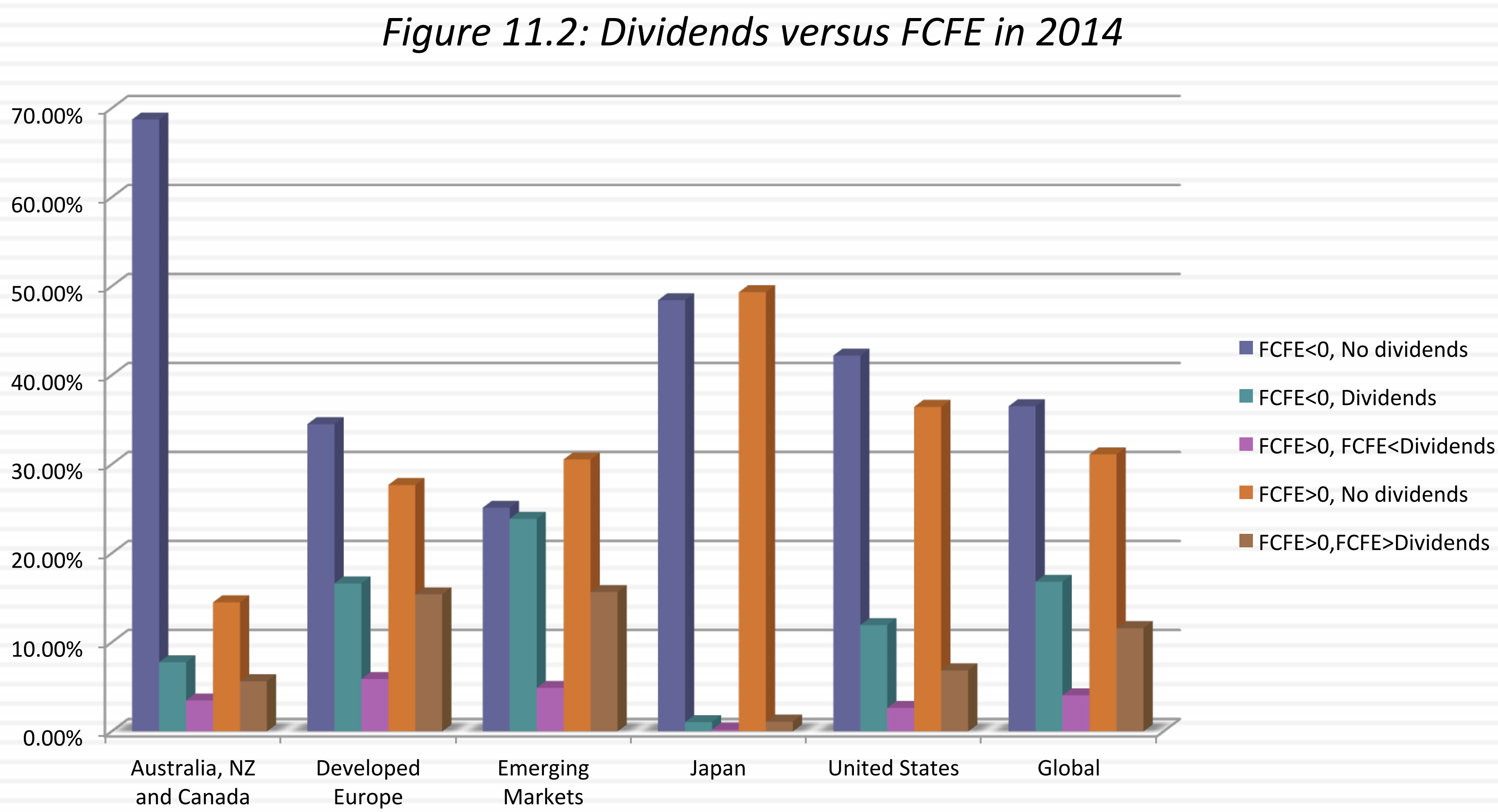
- Consider a bank with $ 10 billion in loans outstanding and book equity of $ 750 million. If it maintains its capital ratio of 7.5%, intends to grow its loan base by 10% (to $11 and expects to generate $ 150 million in net income:

  FCFE = $150 million – (11,000-10,000)* (.075) = $75 million

Deutsche Bank: FCFE estimates (November 2013)

	Current	1	2	3	4	5
Asset Base	439,851 €	453,047 €	466,638 €	480,637 €	495,056 €	509,908 €
Capital ratio	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Tier 1 Capital	70,376 €	72,487 €	74,662 €	76,902 €	79,209 €	81,585 €
Change in regulatory capital		2,111 €	2,175 €	2,240 €	2,307 €	2,376 €
Book Equity	76,829 €	78,940 €	81,115 €	83,355 €	85,662 €	88,038 €
ROE	-1.08%	0.74%	2.55%	4.37%	6.18%	8.00%
Net Income	-757 €	584 €	2,072 €	3,642 €	5,298 €	7,043 €
- Investment in Regulatory Capital		2,111 €	2,175 €	2,240 €	2,307 €	2,376 €
FCFE		-1,528 €	-102 €	1,403 €	2,991 €	4,667 €

Dividends versus FCFE: Across the globe



⌛ Application Test: Estimating your firm's FCFE

- In General,

  Net Income
  + Depreciation & Amortization
  - Capital Expenditures
  - Change in Non-Cash Working Capital
  - Preferred Dividend
  - Principal Repaid
  + New Debt Issued

  = FCFE

If cash flow statement used

Net Income
+ Depreciation & Amortization
+ Capital Expenditures
+ Changes in Non-cash WC
+ Preferred Dividend
+ Increase in LT Borrowing
+ Decrease in LT Borrowing
+ Change in ST Borrowing
= FCFE

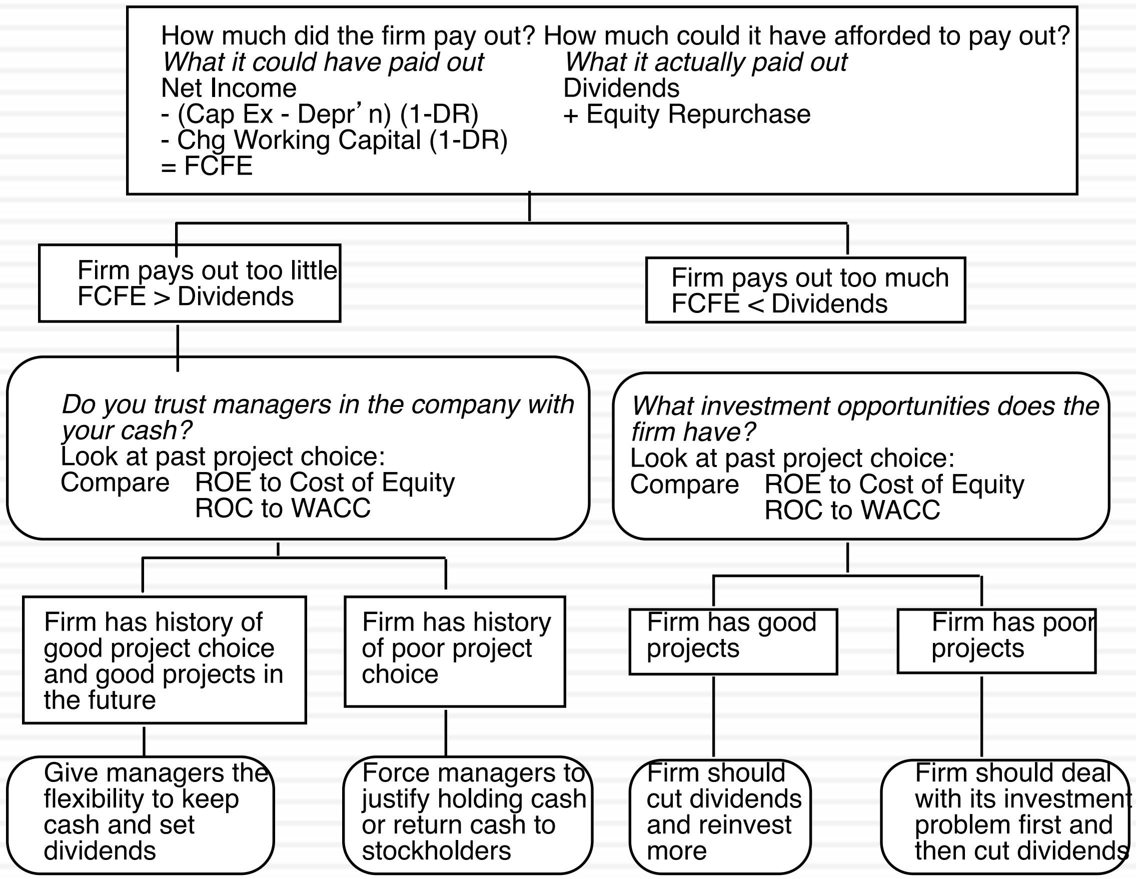
- Compare to

  Dividends (Common)

  + Stock Buybacks

B FA page
PB Page 44

A Practical Framework for Analyzing Dividend Policy



A Dividend Matrix

Quality of projects taken: ROE versus Cost of Equity

Dividends paid out relative to FCFE	Poor projects	Good projects
Cash Surplus	*Cash Surplus + Poor Projects* Significant pressure to pay out more to stockholders as dividends or stock buybacks	*Cash Surplus + Good Projects* Maximum flexibility in setting dividend policy
Cash Deficit	*Cash Deficit + Poor Projects* Cut out dividends but real problem is in investment policy.	*Cash Deficit + Good Projects* Reduce cash payout, if any, to stockholders

Case 1: Disney in 2003

- FCFE versus Dividends
  - Between 1994 & 2003, Disney generated $969 million in FCFE each year.
  - Between 1994 & 2003, Disney paid out $639 million in dividends and stock buybacks each year.
- Cash Balance
  - Disney had a cash balance in excess of $ 4 billion at the end of 2003.
- Performance measures
  - Between 1994 and 2003, Disney has generated a return on equity, on it's projects, about 2% less than the cost of equity, on average each year.
  - Between 1994 and 2003, Disney's stock has delivered about 3% less than the cost of equity, on average each year.
  - The underperformance has been primarily post 1996 (after the Capital Cities acquisition).

Can you trust Disney's management?

- Given Disney's track record between 1994 and 2003, if you were a Disney stockholder, would you be comfortable with Disney's dividend policy?

a. Yes

b. No

- Does the fact that the company is run by Michael Eisner, the CEO for the last 10 years and the initiator of the Cap Cities acquisition have an effect on your decision.

a. Yes

b. No

Following up: Disney in 2009

- Between 2004 and 2008, Disney made significant changes:
  - It replaced its CEO, Michael Eisner, with a new CEO, Bob Iger, who at least on the surface seemed to be more receptive to stockholder concerns.
  - Its stock price performance improved (positive Jensen's alpha)
  - Its project choice improved (ROC moved from being well below cost of capital to above)
- The firm also shifted from cash returned < FCFE to cash returned > FCFE and avoided making large acquisitions.
- If you were a stockholder in 2009 and Iger made a plea to retain cash in Disney to pursue investment opportunities, would you be more receptive?
  a. Yes
  b. No

Final twist: Disney in 2013

- Disney did return to holding cash between 2008 and 2013, with dividends and buybacks amounting to $7 billion less than the FCFE (with actual debt used) over this period.
- Disney continues to earn a return on capital well in excess of the cost of capital and its stock has doubled over the last two years.
- Now, assume that Bob Iger asks you for permission to withhold even more cash to cover future investment needs. Are you likely to go along?

a. Yes

b. No

Case 2: Vale – Dividends versus FCFE

	Aggregate	Average
Net Income	$57,404	$5,740
Dividends	$36,766	$3,677
Dividend Payout Ratio	$1	$1
Stock Buybacks	$6,032	$603
Dividends + Buybacks	$42,798	$4,280
Cash Payout Ratio	$1	
Free CF to Equity (pre-debt)	($1,903)	($190)
Free CF to Equity (actual debt)	$1,036	$104
Free CF to Equity (target debt ratio)	$19,138	$1,914
Cash payout as % of pre-debt FCFE	FCFE negative	
Cash payout as % of actual FCFE	4131.08%	
Cash payout as % of target FCFE	223.63%	

Vale: Its your call..

- Vale's managers have asked you for permission to cut dividends (to more manageable levels). Are you likely to go along?
  a. Yes
  b. No
- The reasons for Vale's dividend problem lie in it's equity structure. Like most Brazilian companies, Vale has two classes of shares - common shares with voting rights and preferred shares without voting rights. However, Vale has committed to paying out 35% of its earnings as dividends to the preferred stockholders. If they fail to meet this threshold, the preferred shares get voting rights. If you own the preferred shares, would your answer to the question above change?
  a. Yes
  b. No

Case 3: BP: Summary of Dividend Policy: 1982-1991

Summary of calculations

	Average	Standard Deviation	Maximum	Minimum
Free CF to Equity	$571.10	$1,382.29	$3,764.00	($612.50)
Dividends	$1,496.30	$448.77	$2,112.00	$831.00
Dividends+Repurchases	$1,496.30	$448.77	$2,112.00	$831.00
Dividend Payout Ratio	84.77%			
Cash Paid as % of FCFE	262.00%			
ROE - Required return	-1.67%	11.49%	20.90%	-21.59%

BP: Just Desserts!

British Petroleum said yesterday that it would cut its dividend by 55 percent, take a pretax restructuring charge of $1.82 billion for the second quarter and lay off 11,500 employees, or 10 percent of its worldwide work force. The moves came five weeks after Robert B. Horton, B.P.'s chairman, resigned under pressure from the company's outside directors.

Analysts anticipated a dividend cut by the oil company, the world's third largest, but the one announced was at the low end of their expectations. In response, shares of the company's American depository rights, each of which represents 12 shares of the London-based company, dropped $3.625, or 7.36 percent, to $45.375. It was the most active issue on the New York Stock Exchange, with 5.89 million shares traded.

The Royal Dutch/Shell group also reported a disappointing quarter yesterday, with earnings on a replacement cost basis — excluding gains or losses on inventory holdings — of $868 million, down 22 percent.

Quick Recovery Seems Unlikely

Adding to the gloom at B.P., the new chief executive, David A. G. Simon, said the prospects for a quick recovery were poor. "External trading conditions are expected to remain difficult, particularly for the downstream oil and chemicals businesses, with growth prospects for the world's economies remaining uncertain," he said in a statement. Downstream oil

Europe, recovery will depend upon seasonal heating oil demand," Mr. Simon said.

The crude oil market, he predicted, would remain balanced unless Iraqi oil was allowed to re-enter the market. The company said it was well positioned to take advantage of any

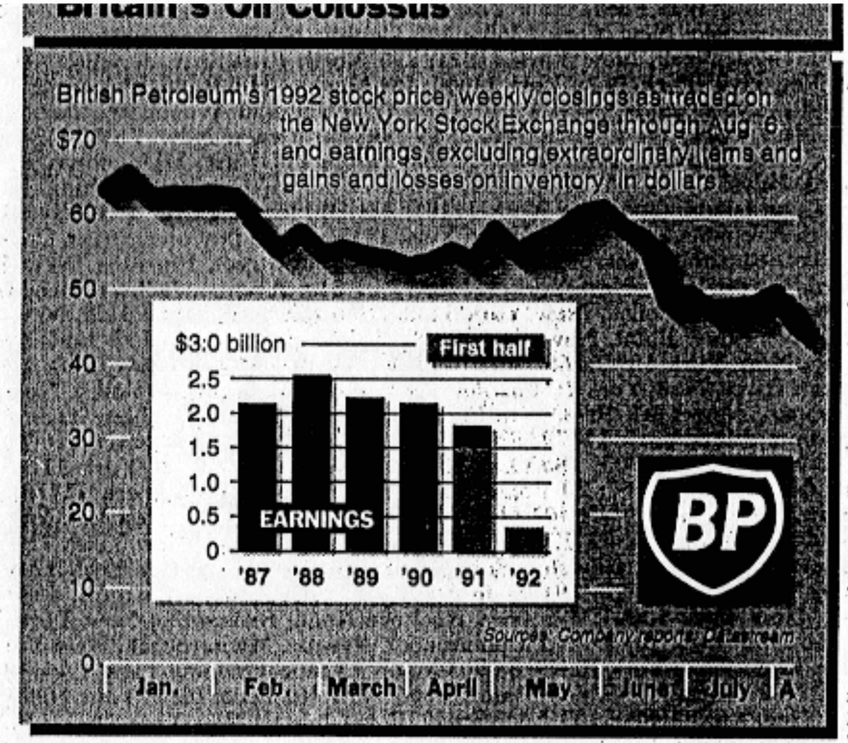
The giant British oil company bet on rising oil prices.

increase in oil prices, but the company's oil production in the United States is declining. B.P. is the largest producer in Alaska.

The market for petrochemicals in Europe remains weak.

B.P.'s second quarter profits, before one-time transactions, declined to $193 million from $515 million, valuing inventories on a replacement-cost basis. James J. Murchie, an analyst at Stanford C. Bernstein, estimated that after exceptional items, earnings per share fell to 30 cents in the second quarter, compared with 62 cents a year earlier.

Analysts attributed B.P.'s problems to the company's acquisitions in the last few years, and heavy capital expenditures. Summing up the company's recent history, Frank P.



The New York Times

after B.P. acquired Sohio, said, "What you've got is a company that thought oil prices were going to go to $25 and spent like it, in terms of capital." If B.P.'s costs of finding oil are the same as the industry average, he said, then the company has been

as it was recording in depreciation.

Another analyst at a large stock brokerage house, who spoke on the condition of anonymity, said, "They took all the old Sohio stations and turned them into modern B.P. stations; they took all the B.P. stations

Case 4: The Limited: Summary of Dividend Policy: 1983-1992

	Summary of calculations			
	Average	*Standard Deviation*	*Maximum*	*Minimum*
Free CF to Equity	($34.20)	$109.74	$96.89	($242.17)
Dividends	$40.87	$32.79	$101.36	$5.97
Dividends+Repurchases	$40.87	$32.79	$101.36	$5.97
Dividend Payout Ratio	18.59%			
Cash Paid as % of FCFE	-119.52%			
ROE - Required return	1.69%	19.07%	29.26%	-19.84%

Growth Firms and Dividends

- High growth firms are sometimes advised to initiate dividends because its increases the potential stockholder base for the company (since there are some investors - like pension funds - that cannot buy stocks that do not pay dividends) and, by extension, the stock price. Do you agree with this argument?
  a. Yes
  b. No
- Why?

5. Tata Motors

	Aggregate	Average
Net Income	$421,338.00	$42,133.80
Dividends	$74,214.00	$7,421.40
Dividend Payout Ratio	17.61%	15.09%
Stock Buybacks	$970.00	$97.00
Dividends + Buybacks	$75,184.00	$7,518.40
Cash Payout Ratio	17.84%	
Free CF to Equity (pre-debt)	($106,871.00)	($10,687.10)
Free CF to Equity (actual debt)	$825,262.00	$82,526.20
Free CF to Equity (target debt ratio)	$47,796.36	$4,779.64
Cash payout as % of pre-debt FCFE	FCFE negative	
Cash payout as % of actual FCFE	9.11%	
Cash payout as % of target FCFE	157.30%	

Negative FCFE, largely because of acquisitions.

⌛ Application Test: Assessing your firm's dividend policy

- Compare your firm's dividends to its FCFE, looking at the last 5 years of information.

- Based upon your earlier analysis of your firm's project choices, would you encourage the firm to return more cash or less cash to its owners?

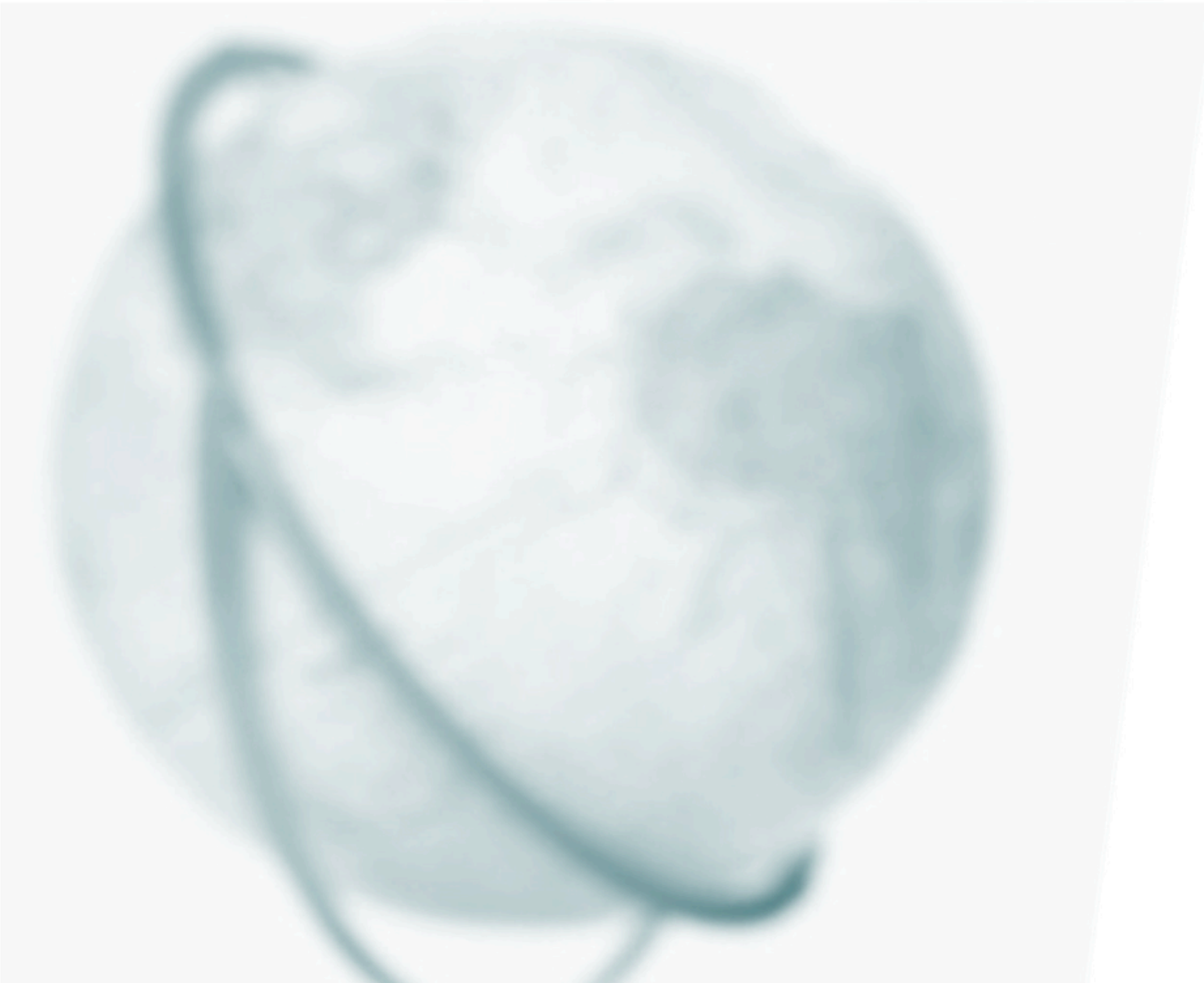
- If you would encourage it to return more cash, what form should it take (dividends versus stock buybacks)?

II. The Peer Group Approach

- In the peer group approach, you compare your company to similar companies (usually in the same market and sector) to assess whether and if yes, how much to pay in dividends.

	Dividend Yield		Dividend Payout				
Company	*2013*	*Average 2008-12*	*2013*	*Average 2008-12*	*Comparable Group*	*Dividend Yield*	*Dividend Payout*
Disney	1.09%	1.17%	21.58%	17.11%	US Entertainment	0.96%	22.51%
Vale	6.56%	4.01%	113.45%	37.69%	Global Diversified Mining & Iron Ore (Market cap> $1 b)	3.07%	316.32%
Tata Motors	1.31%	1.82%	16.09%	15.53%	Global Autos (Market Cap> $1 b)	2.13%	27.00%
Baidu	0.00%	0.00%	0.00%	0.00%	Global Online Advertising	0.09%	8.66%
Deutsche Bank	1.96%	3.14%	362.63%	37.39%	European Banks	1.96%	79.32%

Aswath Damodaran



VALUATION

Cynic: A person who knows the price of everything but the value of nothing..
Oscar Wilde