Returning Cash to the Owners: Dividend Policy

“Companies don’t have cash. They hold cash for their stockholders.”
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
Steps to the Dividend Decision...

- How much did you borrow?
  - Cashflows to Debt (Principal repaid, Interest Expenses)
- How good are your investment choices?
  - Reinvestment back into the business
- What is a reasonable cash balance?
  - Cash held back by the company
- What do your stockholders prefer?
  - Stock Buybacks
  - Cash Paid out
  - Dividends
I. Dividends are sticky
II. Dividends tend to follow earnings

*Figure 10.5: Dividends and Earnings on U.S. companies - 1960 - 2006*
III. More and more firms are buying back stock, rather than pay dividends...
IV. But the change in dividend tax law in 2003 may cause a shift back to dividends
Measures of Dividend Policy

- **Dividend Payout:**
  - measures the percentage of earnings that the company pays in dividends
  - \( \frac{\text{Dividends}}{\text{Earnings}} \)

- **Dividend Yield:**
  - measures the return that an investor can make from dividends alone
  - \( \frac{\text{Dividends}}{\text{Stock Price}} \)
Dividend Payout Ratios: January 2007

Dividend Payout Ratio: January 2007

Firms not paying dividends = 2699
Firms paying dividends = 1664
Payout ratio not meaningful = 2935

Number of firms

0 50 100 150 200 250 300
0-10% 10-20% 20-30% 30-40% 40-50% 50-60% 60-70% 70-80% 80-90% 90-100% >100%

Payout Ratio
Dividend Yields in the United States: January 2007

\[\text{Number of firms}\]

- <0.5%: 150
- 0.5%-1%: 220
- 1%-1.5%: 300
- 1.5%-2%: 250
- 2%-2.5%: 200
- 2.5%-3%: 150
- 3%-3.5%: 100
- 3.5%-4%: 50
- 4%-4.5%: 25
- 4.5%-5%: 10
- >5%: 5

Firms paying dividends = 1310
Firms not paying dividends = 5347
Three Schools Of Thought On Dividends

1. If
   - (a) there are no tax disadvantages associated with dividends
   - (b) companies can issue stock, at no cost, to raise equity, whenever needed
   - **Dividends do not matter, and dividend policy does not affect value.**

2. If dividends have a tax disadvantage,
   - **Dividends are bad, and increasing dividends will reduce value**

3. If stockholders like dividends, or dividends operate as a signal of future prospects,
   - **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**.
Why do firms pay dividends?

- **The Miller-Modigliani Hypothesis:** **Dividends do not affect value**
- **Basis:**
  - If a firm's investment policies (and hence cash flows) don't change, the value of the firm cannot change with dividend policy. If we ignore personal taxes, investors have to be indifferent to receiving either dividends or capital gains.
- **Underlying Assumptions:**
  - (a) There are no tax differences between dividends and capital gains.
  - (b) If companies pay too much in cash, they can issue new stock, with no flotation costs or signaling consequences, to replace this cash.
  - (c) If companies pay too little in dividends, they do not use the excess cash for bad projects or acquisitions.
The Classic Tax Response: Until 2003, dividends were taxed much more heavily than capital gains...
Gauging the tax effect by looking at Price Behavior on Ex-Dividend Date

Assume that you are the owner of a stock that is approaching an ex-dividend day and you know that dollar dividend with certainty. In addition, assume that you have owned the stock for several years. Let $P_b =$ Price before the stock goes ex-dividend

$P_a =$ Price after the stock goes ex-dividend

$D =$ Dividends declared on stock

$t_o, t_{cg} =$ Taxes paid on ordinary income and capital gains respectively

$P_b \to D\mid \text{Ex-Dividend Day} \mid P_a$
Cashflows from Selling around Ex-Dividend Day

- The cash flows from selling before then are:
  \[ P_b - (P_b - P) \times t_{cg} \]

- The cash flows from selling after the ex-dividend day are:
  \[ P_a - (P_a - P) \times t_{cg} + D(1-t_o) \]

Since the average investor should be indifferent between selling before the ex-dividend day and selling after the ex-dividend day:

\[ P_b - (P_b - P) \times t_{cg} = P_a - (P_a - P) \times t_{cg} + D(1-t_o) \]

Moving the variables around, we arrive at the following:
Price Change, Dividends and Tax Rates

\[
\frac{P_b - P_a}{D} = \frac{(1 - t_o)}{(1 - t_{cg})}
\]

If

- \(P_b - P_a = D\) then \(t_o = t_{cg}\)
- \(P_b - P_a < D\) then \(t_o > t_{cg}\)
- \(P_b - P_a > D\) then \(t_o < t_{cg}\)
# The Evidence on Ex-Dividend Day Behavior

<table>
<thead>
<tr>
<th>Year</th>
<th>Ordinary Income</th>
<th>Capital Gains</th>
<th>( \frac{P_b - P_d}{D} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1981</td>
<td>70 %</td>
<td>28 %</td>
<td>0.78 (1966-69)</td>
</tr>
<tr>
<td>1981-85</td>
<td>50 %</td>
<td>20 %</td>
<td>0.85</td>
</tr>
<tr>
<td>1986-1990</td>
<td>28 %</td>
<td>28 %</td>
<td>0.90</td>
</tr>
<tr>
<td>1991-1993</td>
<td>33 %</td>
<td>28 %</td>
<td>0.92</td>
</tr>
<tr>
<td>1994</td>
<td>39.6 %</td>
<td>28 %</td>
<td>0.90</td>
</tr>
</tbody>
</table>
Dividend Arbitrage

Assume that you are a tax exempt investor, and that you know that the price drop on the ex-dividend day is only 90% of the dividend. How would you exploit this differential?

- Invest in the stock for the long term
- Sell short the day before the ex-dividend day, buy on the ex-dividend day
- Buy just before the ex-dividend day, and sell after.
- ________________________________
Example of dividend capture strategy with tax factors

- XYZ company is selling for $50 at close of trading May 3. On May 4, XYZ goes ex-dividend; the dividend amount is $1. The price drop (from past examination of the data) is only 90% of the dividend amount.

- The transactions needed by a tax-exempt U.S. pension fund for the arbitrage are as follows:
  - 1. Buy 1 million shares of XYZ stock cum-dividend at $50/share.
  - 2. Wait till stock goes ex-dividend; Sell stock for $49.10/share (50 - 1* 0.90)
  - 3. Collect dividend on stock.

- Net profit = - 50 million + 49.10 million + 1 million = $0.10 million
Two bad reasons for paying dividends
1. The bird in the hand fallacy

- **Argument:** Dividends now are more certain than capital gains later. Hence dividends are more valuable than capital gains. Stocks that pay dividends will therefore be more highly valued than stocks that do not.

- **Counter:** The appropriate comparison should be between dividends today and price appreciation today. The stock price drops on the ex-dividend day.
2. We have excess cash this year…

- **Argument**: The firm has excess cash on its hands this year, no investment projects this year and wants to give the money back to stockholders.
- **Counter**: So why not just repurchase stock? If this is a one-time phenomenon, the firm has to consider future financing needs. Consider the cost of issuing new stock:
The Cost of Raising Capital

![Graph showing issuance costs for stocks and bonds by size of issue. The x-axis represents size of issue (Under $1 mil, $1.0-1.9 mil, $2.0-4.9 mil, $5.0-$9.9 mil, $10-19.9 mil, $20-49.9 mil, $50 mil and over), and the y-axis represents cost as % of funds raised. Bars show cost of issuing bonds and cost of issuing common stock.]}
Three “good” reasons for paying dividends…

1. **Clientele Effect**: The investors in your company like dividends.
2. **The Signalling Story**: Dividends can be signals to the market that you believe that you have good cash flow prospects in the future.
3. **The Wealth Appropriation Story**: Dividends are one way of transferring wealth from lenders to equity investors (this is good for equity investors but bad for lenders)
1. The Clientele Effect: Dividends or Capital Gains..
Evidence from Canadian Firms

<table>
<thead>
<tr>
<th>Company</th>
<th>Premium for Cash dividend over Stock Dividend Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Bathurst</td>
<td>19.30%</td>
</tr>
<tr>
<td>Donfasco</td>
<td>13.30%</td>
</tr>
<tr>
<td>Dome Petroleum</td>
<td>0.30%</td>
</tr>
<tr>
<td>Imperial Oil</td>
<td>12.10%</td>
</tr>
<tr>
<td>Newfoundland Light &amp; Power</td>
<td>1.80%</td>
</tr>
<tr>
<td>Royal Trustco</td>
<td>17.30%</td>
</tr>
<tr>
<td>Stelco</td>
<td>2.70%</td>
</tr>
<tr>
<td>TransAlta</td>
<td>1.10%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>7.54%</strong></td>
</tr>
</tbody>
</table>
A clientele based explanation

**Basis:** Investors may form clienteles based upon their tax brackets. Investors in high tax brackets may invest in stocks which do not pay dividends and those in low tax brackets may invest in dividend paying stocks.

**Evidence:** A study of 914 investors' portfolios was carried out to see if their portfolio positions were affected by their tax brackets. The study found that

- (a) Older investors were more likely to hold high dividend stocks and
- (b) Poorer investors tended to hold high dividend stocks
Results from Regression: Clientele Effect

\[
\text{Dividend Yield}_t = a + b \beta_t + c \text{Age}_t + d \text{Income}_t + e \text{Differential Tax Rate}_t + \epsilon_t
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Implies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.22%</td>
<td>Higher beta stocks pay lower dividends.</td>
</tr>
<tr>
<td>Beta Coefficient</td>
<td>-2.145</td>
<td>Firms with older investors pay higher dividends.</td>
</tr>
<tr>
<td>Age/100</td>
<td>3.131</td>
<td>Firms with wealthier investors pay lower dividends.</td>
</tr>
<tr>
<td>Income/1000</td>
<td>-3.726</td>
<td>If ordinary income is taxed at a higher rate than capital gains, the firm pays less dividends.</td>
</tr>
<tr>
<td>Differential Tax Rate</td>
<td>-2.849</td>
<td></td>
</tr>
</tbody>
</table>
Dividend Policy and Clientele

Assume that you run a phone company, and that you have historically paid large dividends. You are now planning to enter the telecommunications and media markets. Which of the following paths are you most likely to follow?

- Courageously announce to your stockholders that you plan to cut dividends and invest in the new markets.
- Continue to pay the dividends that you used to, and defer investment in the new markets.
- Continue to pay the dividends that you used to, make the investments in the new markets, and issue new stock to cover the shortfall.
- Other
2. Dividends send a signal”
Increases in dividends are good news..

Days relative to the announcement date of dividends

(a) Dividend decrease

(b) Dividend increase
An Alternative Story.. Increasing dividends is bad news...

**TABLE 1**

<table>
<thead>
<tr>
<th>Year Relative to Dividend Initiation</th>
<th>Number of Firms</th>
<th>Mean Earnings Growth Rate</th>
<th>Median Earnings Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>130</td>
<td>14.9%</td>
<td>17.4%</td>
</tr>
<tr>
<td>-3</td>
<td>129</td>
<td>-7.1</td>
<td>7.6</td>
</tr>
<tr>
<td>-2</td>
<td>128</td>
<td>12.9</td>
<td>10.5</td>
</tr>
<tr>
<td>-1</td>
<td>131</td>
<td>42.7**</td>
<td>28.0</td>
</tr>
<tr>
<td>1</td>
<td>130</td>
<td>55.0**</td>
<td>40.2</td>
</tr>
<tr>
<td>2</td>
<td>130</td>
<td>22.0**</td>
<td>35.9</td>
</tr>
<tr>
<td>3</td>
<td>130</td>
<td>35.0**</td>
<td>28.2</td>
</tr>
<tr>
<td>4</td>
<td>128</td>
<td>3.5</td>
<td>19.5</td>
</tr>
</tbody>
</table>

* In our original research we compute earnings performance as earnings changes standardized by stock prices. Here we convert these values to earnings growth rates by assuming that the average price earnings ratio for the sample firms is ten.

**FIGURE 1**

**MEDIAN EARNINGS GROWTH RATES IN YEARS SURROUNDING FIRST TIME DIVIDEND PAYMENT**

*In our original research we compute earnings performance as earnings changes standardized by stock prices. Here we convert these values to earnings growth rates by assuming that the average price earnings ratio for the sample firms is ten.*
3. Dividend increases may be good for stocks… but bad for bonds.

EXCESS RETURNS ON STRAIGHT BONDS AROUND DIVIDEND CHANGES

Day (0: Announcement date)

CAR (Div Up)

CAR (Div down)
Assessing Dividend Policy

- **Approach 1: The Cash/Trust Nexus**
  - Assess how much cash a firm has available to pay in dividends, relative to 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 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?
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
Estimating FCFE when Leverage is Stable

Net Income
- (1 - δ) (Capital Expenditures - Depreciation)
- (1 - δ) Working Capital Needs
= Free Cash flow to Equity

δ = Debt/Capital Ratio

For this firm,
- Proceeds from new debt issues = Principal Repayments + δ (Capital Expenditures - Depreciation + Working Capital Needs)
Consider the following inputs for Microsoft in 1996. In 1996, Microsoft’s FCFE was:

- Net Income = $2,176 Million
- Capital Expenditures = $494 Million
- Depreciation = $480 Million
- Change in Non-Cash Working Capital = $35 Million
- Debt Ratio = 0%

FCFE = Net Income - (Cap ex - Depr) (1-DR) - Chg WC (!-DR)

= $2,176 - (494 - 480) (1 - 0) - $35 (1 - 0)
= $2,127 Million
By this estimation, Microsoft could have paid $2,127 Million in dividends/stock buybacks in 1996. They paid no dividends and bought back no stock. Where will the $2,127 million show up in Microsoft’s balance sheet?
Dividends versus FCFE: U.S.
The Consequences of Failing to pay FCFE

Chrysler: FCFE, Dividends and Cash Balance

- Free CF to Equity
- Cash to Stockholders
- Cumulated Cash


Cash Flow: $0, $500, $1,000, $1,500, $2,000, $2,500, $3,000

Cash Balance: $0, $500, $1,000, $1,500, $2,000, $2,500, $3,000, $4,000, $5,000, $6,000, $7,000, $8,000, $9,000
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

Compare to
- Dividends (Common)
+ + Stock Buybacks

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

- - Common Dividend
- - Decrease in Capital Stock
+ + Increase in Capital Stock
A Practical Framework for Analyzing Dividend Policy

How much did the firm pay out? How much could it have afforded to pay out?

- What it could have paid out
  - Net Income
  - (Cap Ex - Depr’n) (1-DR)
  - Chg Working Capital (1-DR)
  = FCFE

- What it actually paid out
  - Dividends
  + Equity Repurchase

Firm pays out too little
FCFE > Dividends

Do you trust managers in the company with your cash?
Look at past project choice:
Compare ROE to Cost of Equity
ROC to WACC

Firm has history of good project choice and good projects in the future
Give managers the flexibility to keep cash and set dividends

Firm has history of poor project choice
Force managers to justify holding cash or return cash to stockholders

Firm pays out too much
FCFE < Dividends

What investment opportunities does the firm have?
Look at past project choice:
Compare ROE to Cost of Equity
ROC to WACC

Firm has good projects
Firm should cut dividends and reinvest more

Firm has poor projects
Firm should deal with its investment problem first and then cut dividends
## A Dividend Matrix

<table>
<thead>
<tr>
<th>Cash Surplus + Poor Projects</th>
<th>Cash Surplus + Good Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant pressure to pay out more to stockholders as dividends or stock buybacks</td>
<td>Maximum flexibility in setting dividend policy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash Deficit + Poor Projects</th>
<th>Cash Deficit + Good Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut out dividends but real problem is in investment policy.</td>
<td>Reduce cash payout, if any, to stockholders</td>
</tr>
</tbody>
</table>
More on Microsoft

- Microsoft had accumulated a cash balance of $43 billion by 2003 by paying out no dividends while generating huge FCFE. At the end of 2003, there was no evidence that
  - Microsoft was being penalized for holding such a large cash balance
  - Stockholders were becoming restive about the cash balance. There was no hue and cry demanding more dividends or stock buybacks.

- Why?
Microsoft’s big dividend in 2004

In 2004, Microsoft announced a huge special dividend of $33 billion and made clear that it would try to return more cash to stockholders in the future. What do you think changed?
Disney: An analysis of FCFE from 1994-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income</th>
<th>Depreciation</th>
<th>Capital Expenditures</th>
<th>Change in non-cash WC</th>
<th>FCFE (before debt CF)</th>
<th>Net CF from Debt</th>
<th>FCFE (after Debt CF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$1,110.40</td>
<td>$1,608.30</td>
<td>$1,026.11</td>
<td>$654.10</td>
<td>$1,038.49</td>
<td>$551.10</td>
<td>$1,589.59</td>
</tr>
<tr>
<td>1995</td>
<td>$1,380.10</td>
<td>$1,853.00</td>
<td>$896.50</td>
<td>($270.70)</td>
<td>$2,607.30</td>
<td>$14.20</td>
<td>$2,621.50</td>
</tr>
<tr>
<td>1996</td>
<td>$1,214.00</td>
<td>$3,944.00</td>
<td>$13,464.00</td>
<td>$617.00</td>
<td>($8,923.00)</td>
<td>$8,688.00</td>
<td>($235.00)</td>
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<tr>
<td>1997</td>
<td>$1,966.00</td>
<td>$4,958.00</td>
<td>$1,922.00</td>
<td>($174.00)</td>
<td>$5,176.00</td>
<td>($1,641.00)</td>
<td>$3,535.00</td>
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<tr>
<td>1998</td>
<td>$1,850.00</td>
<td>$3,323.00</td>
<td>$2,314.00</td>
<td>$939.00</td>
<td>$1,920.00</td>
<td>$618.00</td>
<td>$2,538.00</td>
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<tr>
<td>1999</td>
<td>$1,300.00</td>
<td>$3,779.00</td>
<td>$2,134.00</td>
<td>($363.00)</td>
<td>$3,308.00</td>
<td>($176.00)</td>
<td>$3,132.00</td>
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<tr>
<td>2000</td>
<td>$920.00</td>
<td>$2,195.00</td>
<td>$2,013.00</td>
<td>($1,184.00)</td>
<td>$2,286.00</td>
<td>($2,118.00)</td>
<td>$168.00</td>
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<tr>
<td>2001</td>
<td>($158.00)</td>
<td>$1,754.00</td>
<td>$1,795.00</td>
<td>$244.00</td>
<td>($443.00)</td>
<td>$77.00</td>
<td>($366.00)</td>
</tr>
<tr>
<td>2002</td>
<td>$1,236.00</td>
<td>$1,042.00</td>
<td>$1,086.00</td>
<td>$27.00</td>
<td>$1,165.00</td>
<td>$1,892.00</td>
<td>$3,057.00</td>
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<tr>
<td>2003</td>
<td>$1,267.00</td>
<td>$1,077.00</td>
<td>$1,049.00</td>
<td>($264.00)</td>
<td>$1,559.00</td>
<td>($1,145.00)</td>
<td>$414.00</td>
</tr>
<tr>
<td>Average</td>
<td>$1,208.55</td>
<td>$2,553.33</td>
<td>$2,769.96</td>
<td>$22.54</td>
<td>$969.38</td>
<td>$676.03</td>
<td>$1,645.41</td>
</tr>
</tbody>
</table>
## Disney’s Dividends and Buybacks from 1994 to 2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Dividends (in $)</th>
<th>Equity Repurchases (in $)</th>
<th>Cash to Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>$153</td>
<td>$571</td>
<td>$724</td>
</tr>
<tr>
<td>1995</td>
<td>$180</td>
<td>$349</td>
<td>$529</td>
</tr>
<tr>
<td>1996</td>
<td>$271</td>
<td>$462</td>
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<tr>
<td>1997</td>
<td>$342</td>
<td>$633</td>
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<td>1998</td>
<td>$412</td>
<td>$30</td>
<td>$442</td>
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<td>1999</td>
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<td>$19</td>
<td>$19</td>
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<tr>
<td>2000</td>
<td>$434</td>
<td>$166</td>
<td>$600</td>
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<tr>
<td>2001</td>
<td>$438</td>
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<td>2002</td>
<td>$428</td>
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<td>$428</td>
</tr>
<tr>
<td>2003</td>
<td>$429</td>
<td>$0</td>
<td>$429</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>$ 308.70</strong></td>
<td><strong>$ 330.30</strong></td>
<td><strong>$ 639</strong></td>
</tr>
</tbody>
</table>
Disney paid out $330 million less in dividends (and stock buybacks) than it could afford to pay out (Dividends and stock buybacks were $639 million; FCFE before net debt issues was $969 million). How much cash do you think Disney accumulated during the period?
Disney’s track record on projects and stockholder wealth
Can you trust Disney’s management?

- Given Disney’s track record over the last 10 years, if you were a Disney stockholder, would you be comfortable with Disney’s dividend policy?
  - Yes
  - No
The Bottom Line on Disney Dividends

- Disney could have afforded to pay more in dividends during the period of the analysis.
- It chose not to, and used the cash for acquisitions (Capital Cities/ABC) and ill fated expansion plans (Go.com).
- While the company may have flexibility to set its dividend policy a decade ago, its actions over that decade have frittered away this flexibility.
- Bottom line: Large cash balances will not be tolerated in this company. Expect to face relentless pressure to pay out more dividends.
### Aracruz: Dividends and FCFE: 1998-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income</th>
<th>Depreciation</th>
<th>Capital Expenditures</th>
<th>Change in non-cash WC</th>
<th>FCFE (before net Debt CF)</th>
<th>Net Debt Cashflow</th>
<th>FCFE (after net Debt CF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$3.45</td>
<td>$152.80</td>
<td>$88.31</td>
<td>($8.11)</td>
<td>$174.27</td>
<td>$166.16</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>$90.77</td>
<td>$158.83</td>
<td>$56.47</td>
<td>$2.18</td>
<td>$190.95</td>
<td>($604.48)</td>
<td>($413.53)</td>
</tr>
<tr>
<td>2000</td>
<td>$201.71</td>
<td>$167.96</td>
<td>$219.37</td>
<td>$12.30</td>
<td>$138.00</td>
<td>($292.07)</td>
<td>($154.07)</td>
</tr>
<tr>
<td>2001</td>
<td>$18.11</td>
<td>$162.57</td>
<td>$421.49</td>
<td>($56.76)</td>
<td>($184.06)</td>
<td>$318.24</td>
<td>$134.19</td>
</tr>
<tr>
<td>2002</td>
<td>$111.91</td>
<td>$171.50</td>
<td>$260.70</td>
<td>($5.63)</td>
<td>$28.34</td>
<td>$36.35</td>
<td>$64.69</td>
</tr>
<tr>
<td>2003</td>
<td>$148.09</td>
<td>$162.57</td>
<td>$421.49</td>
<td>($7.47)</td>
<td>($103.37)</td>
<td>$531.20</td>
<td>$427.83</td>
</tr>
<tr>
<td>Average</td>
<td>$95.67</td>
<td>$162.70</td>
<td>$244.64</td>
<td>$3.45</td>
<td>$10.29</td>
<td>$27.25</td>
<td>$37.54</td>
</tr>
</tbody>
</table>
## Aracruz: Cash Returned to Stockholders

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income</th>
<th>Dividends</th>
<th>Payout Ratio</th>
<th>FCFE</th>
<th>Cash returned to Stockholders</th>
<th>Cash Returned/FCFE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$3.45</td>
<td>$24.39</td>
<td>707.51%</td>
<td>$166.16</td>
<td>$50.79</td>
<td>30.57%</td>
</tr>
<tr>
<td>1999</td>
<td>$90.77</td>
<td>$18.20</td>
<td>20.05%</td>
<td>$(413.53)</td>
<td>$18.20</td>
<td>NA</td>
</tr>
<tr>
<td>2000</td>
<td>$201.71</td>
<td>$57.96</td>
<td>28.74%</td>
<td>$(154.07)</td>
<td>$80.68</td>
<td>NA</td>
</tr>
<tr>
<td>2001</td>
<td>$18.11</td>
<td>$63.17</td>
<td>348.87%</td>
<td>$134.19</td>
<td>$63.17</td>
<td>47.08%</td>
</tr>
<tr>
<td>2002</td>
<td>$111.91</td>
<td>$73.80</td>
<td>65.94%</td>
<td>$64.69</td>
<td>$75.98</td>
<td>117.45%</td>
</tr>
<tr>
<td>2003</td>
<td>$148.09</td>
<td>$109.31</td>
<td>73.81%</td>
<td>$427.83</td>
<td>$112.31</td>
<td>26.25%</td>
</tr>
<tr>
<td>1998-2003</td>
<td>$574.04</td>
<td>$346.83</td>
<td>60.42%</td>
<td>$225.27</td>
<td>$401.12</td>
<td>178.07%</td>
</tr>
</tbody>
</table>
Aracruz: Stock and Project Returns

Figure 11.4: ROE, Return on Stock and Cost of Equity: Aracruz
Aracruz: Its your call..

Assume that you are a large preferred stockholder (with no voting rights) in Aracruz. They have been paying more in dividends than they have available in FCFE. Their project choice has been acceptable and your stock has performed well over the period. Would you accept a cut in dividends?

- Yes
- No
Mandated Dividend Payouts

There are many countries where companies are mandated to pay out a certain portion of their earnings as dividends. Given our discussion of FCFE, what types of companies will be hurt the most by these laws?

- Large companies making huge profits
- Small companies losing money
- High growth companies that are losing money
- High growth companies that are making money
## BP: Dividends- 1983-92

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Income</th>
<th>Cap. Exp - Depr*(1-DR)</th>
<th>Working Capital*(1-DR)</th>
<th>Free CF to Equity</th>
<th>Dividends</th>
<th>Equity Repurchases</th>
<th>Cash to Stockholders</th>
<th>Performance Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$1,256.00</td>
<td>$1,499.00</td>
<td>$369.50</td>
<td>($612.50)</td>
<td>$831.00</td>
<td></td>
<td>($831.00)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>$1,626.00</td>
<td>$1,281.00</td>
<td>$631.50</td>
<td>$631.50</td>
<td>$949.00</td>
<td></td>
<td>$949.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$2,309.00</td>
<td>$1,737.50</td>
<td>$107.00</td>
<td>$107.00</td>
<td>$1,079.00</td>
<td></td>
<td>$1,079.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$1,098.00</td>
<td>$1,600.00</td>
<td>$584.00</td>
<td>$584.00</td>
<td>$1,314.00</td>
<td></td>
<td>$1,314.00</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>$2,076.00</td>
<td>$580.00</td>
<td>($2,268.00)</td>
<td>($2,268.00)</td>
<td>$1,391.00</td>
<td></td>
<td>$1,391.00</td>
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</tr>
<tr>
<td>6</td>
<td>$2,140.00</td>
<td>$1,184.00</td>
<td>($984.50)</td>
<td>($984.50)</td>
<td>$1,940.50</td>
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<td>$1,940.50</td>
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<tr>
<td>7</td>
<td>$2,542.00</td>
<td>$1,090.00</td>
<td>$429.50</td>
<td>$429.50</td>
<td>$1,022.00</td>
<td></td>
<td>$1,022.00</td>
<td></td>
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<tr>
<td>8</td>
<td>$2,946.00</td>
<td>$1,975.50</td>
<td>$1,047.50</td>
<td>$1,047.50</td>
<td>$1,895.00</td>
<td></td>
<td>$1,895.00</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>$712.00</td>
<td>$1,975.50</td>
<td>($305.00)</td>
<td>($305.00)</td>
<td>$2,112.00</td>
<td></td>
<td>$2,112.00</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>$947.00</td>
<td>$1,545.50</td>
<td>($415.00)</td>
<td>($415.00)</td>
<td>$1,685.00</td>
<td></td>
<td>$1,685.00</td>
<td></td>
</tr>
</tbody>
</table>

### Dividend Ratios
- **Payout Ratio**
  - 1983: 66.16%
  - 1984: 58.36%
  - 1985: 46.73%
  - 1986: 119.67%
  - 1987: 67.00%
  - 1988: 91.64%
  - 1989: 68.69%
  - 1990: 64.32%
  - 1991: 296.63%
  - 1992: 177.93%

- **Cash Paid as % of FCFE**
  - 1983: -135.67%
  - 1984: 150.28%
  - 1985: -1008.41%
  - 1986: -225.00%
  - 1987: 36.96%
  - 1988: 101.06%
  - 1989: 170.84%
  - 1990: -2461.04%
  - 1991: -399.62%
  - 1992: 643.13%

### Performance Ratios
1. **Accounting Measure**
   - **ROE**
     - 1983: 9.58%
     - 1984: 12.14%
     - 1985: 19.82%
     - 1986: 9.25%
     - 1987: 12.43%
     - 1988: 15.60%
     - 1989: 21.47%
     - 1990: 19.93%
     - 1991: 4.27%
     - 1992: 7.66%
   - **Required rate of return**
     - 1983: 19.77%
     - 1984: 6.99%
     - 1985: 27.27%
     - 1986: 16.01%
     - 1987: 5.28%
     - 1988: 14.72%
     - 1989: 26.87%
     - 1990: -0.97%
     - 1991: 25.86%
     - 1992: 7.12%
   - **Difference**
     - 1983: -10.18%
     - 1984: 5.16%
     - 1985: -7.45%
     - 1986: -6.76%
     - 1987: 7.15%
     - 1988: 0.88%
     - 1989: -5.39%
     - 1990: 20.90%
     - 1991: -21.59%
     - 1992: 0.54%
BP: Summary of Dividend Policy

<table>
<thead>
<tr>
<th>Summary of calculations</th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free CF to Equity</td>
<td>$571.10</td>
<td>$1,382.29</td>
<td>$3,764.00</td>
<td>($612.50)</td>
</tr>
<tr>
<td>Dividends</td>
<td>$1,496.30</td>
<td>$448.77</td>
<td>$2,112.00</td>
<td>$831.00</td>
</tr>
<tr>
<td>Dividends + Repurchases</td>
<td>$1,496.30</td>
<td>$448.77</td>
<td>$2,112.00</td>
<td>$831.00</td>
</tr>
<tr>
<td>Dividend Payout Ratio</td>
<td>84.77%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash Paid as % of FCFE</td>
<td>262.00%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE - Required return</td>
<td>-1.67%</td>
<td>11.49%</td>
<td>20.90%</td>
<td>-21.59%</td>
</tr>
</tbody>
</table>
B.P.'s Shares Plummet After Dividend Is Slashed

By MATTHEW L. WALD

British Petroleum said yesterday that it would cut its dividend by 15 percent, a stunning move that could cost the company about $1.5 billion, or 10 percent of its worldwide cash flow. The move came five weeks after Robert B. Hunter, B.P.'s chairman, resigned under pressure from the company's outside directors.

The divestiture of the dividend, which is paid annually 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 depositary receipts, each of which represents 12 shares of the London-based company, dropped $4.26, or 7.3 percent, to $54.45. The stock has now fallen 19.3 percent since it first traded on the New York Stock Exchange, with 5.6 million shares trading.

The Royal Dutch/Shell group also reported a disappointing quarter yesterday, with earnings on a replaceable cash basis — excluding gains or losses on inventory holdings — of $116 million, down 32 percent.

Quick Recovery Seems Unlikely

Adding to the gloom at B.P., the "new oil executive," David A. G. Sturman, said the prospects for a quick recovery were "not too rosy." General heads are earning nearly $1 million a year, a difficult, particularly for the down- streamers, who are struggling with growth prospects for the world's most profitable segment, he said in a statement.

Downstream oil is an industry term for refining and marketing operations, as distinct from all operations.

Downstream mergers in the United States were put to work later this year, he predicted, when clean air rules take effect and gasoline must be reformulated to reduce pollution. "An European recovery will depend upon seasonal heating oil demand," Mr. Sturman said.

The crude oil market, he predicted, would remain balanced unless Brazil's well production fell off by 100,000 barrels a day.

The company said it was well positioned for the increased demand for petrochemicals in Europe, which remains weak.

B.P.'s second quarter profits, before one-time transactions, declined to $5.13 billion from $1.8 billion, valuing inventories on a replaceable cash basis.

The giant British oil company bet on rising oil prices.

The market for petrochemicals is Europe remains weak.

B.P.'s second quarter profits, before one-time transactions, declined to $5.13 billion from $1.8 billion, valuing inventories on a replaceable cash basis.

The giant British oil company bet on rising oil prices.

<table>
<thead>
<tr>
<th>Summary of calculations</th>
<th>Average</th>
<th>Standard Deviation</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Free CF to Equity</strong></td>
<td>($34.20)</td>
<td>$109.74</td>
<td>$96.89</td>
<td>($242.17)</td>
</tr>
<tr>
<td><strong>Dividends</strong></td>
<td>$40.87</td>
<td>$32.79</td>
<td>$101.36</td>
<td>$5.97</td>
</tr>
<tr>
<td><strong>Dividends+Repurchases</strong></td>
<td>$40.87</td>
<td>$32.79</td>
<td>$101.36</td>
<td>$5.97</td>
</tr>
<tr>
<td><strong>Dividend Payout Ratio</strong></td>
<td>18.59%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cash Paid as % of FCFE</strong></td>
<td>-119.52%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ROE - Required return</strong></td>
<td>1.69%</td>
<td>19.07%</td>
<td>29.26%</td>
<td>-19.84%</td>
</tr>
</tbody>
</table>
High growth firms are sometimes advised to initiate dividends because it 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?

- Yes
- No
Why?
Summing up…

Figure 11.5: Analyzing Dividend Policy

- **ROE - Cost of Equity**
  - Cash Returned < FCFE
  - Cash Returned > FCFE

- **Poor Projects**
  - Increase payout
  - Reduce Investment
  - Disney
  - Microsoft 2005

- **Good Projects**
  - Flexibility to accumulate cash
  - Invest in Projects
  - Microsoft 2002
  - Aracruz

- **Cash Returned < FCFE**
- **Cash Returned > FCFE**

- **Increase payout**
- **Reduce Investment**
- **Cut payout**
- **Reduce Investment**
- **Cut payout**
- **Invest in Projects**
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 - Disney

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Dividend Yield</th>
<th>Dividend Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astral Media Inc. 'A'</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Belo Corp. 'A'</td>
<td>1.34%</td>
<td>34.13%</td>
</tr>
<tr>
<td>CanWest Global Comm. Corp.</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Cinram Intl Inc</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Clear Channel</td>
<td>0.85%</td>
<td>35.29%</td>
</tr>
<tr>
<td>Cox Radio 'A' Inc</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Cumulus Media Inc</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Disney (Walt)</strong></td>
<td><strong>0.90%</strong></td>
<td><strong>32.31%</strong></td>
</tr>
<tr>
<td>Emmis Communications</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Entercom Comm. Corp</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Fox Entmt Group Inc</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Hearst-Argyle Television Inc</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>InterActiveCorp</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Liberty Media 'A'</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Lin TV Corp.</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Metro Goldwyn Mayer</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Pixar</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Radio One INC.</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Regal Entertainment Group</td>
<td>2.70%</td>
<td>66.57%</td>
</tr>
<tr>
<td>Sinclair Broadcast</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sirius Satellite</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Time Warner</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Univision Communic.</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Viacom Inc. 'B'</td>
<td>0.56%</td>
<td>19.00%</td>
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<tr>
<td>Westwood One</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>XM Satellite 'A'</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>0.24%</strong></td>
<td><strong>7.20%</strong></td>
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</table>
Peer Group Approach: Deutsche Bank

<table>
<thead>
<tr>
<th>Name</th>
<th>Dividend Yield</th>
<th>Dividend Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banca Intesa Spa</td>
<td>1.57 %</td>
<td>167.50 %</td>
</tr>
<tr>
<td>Banco Bilbao Vizcaya Argenta</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Banco Santander Central Hispano</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Barclays Plc</td>
<td>3.38 %</td>
<td>35.61 %</td>
</tr>
<tr>
<td>Bnp Paribas</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td><strong>Deutsche Bank Ag -Reg</strong></td>
<td><strong>1.98 %</strong></td>
<td><strong>481.48 %</strong></td>
</tr>
<tr>
<td>Erste Bank Der Oester Spark</td>
<td>0.99 %</td>
<td>24.31 %</td>
</tr>
<tr>
<td>Hbos Plc</td>
<td>2.85 %</td>
<td>27.28 %</td>
</tr>
<tr>
<td>Hsbc Holdings Plc</td>
<td>2.51 %</td>
<td>39.94 %</td>
</tr>
<tr>
<td>Lloyds Tsb Group Plc</td>
<td>7.18 %</td>
<td>72.69 %</td>
</tr>
<tr>
<td>Royal Bank Of Scotland Group</td>
<td>3.74 %</td>
<td>38.73 %</td>
</tr>
<tr>
<td>Sanpaolo Imi Spa</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Societe Generale</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td>Standard Chartered Plc</td>
<td>3.61 %</td>
<td>46.35 %</td>
</tr>
<tr>
<td>Unicredito Italiano Spa</td>
<td>0.00 %</td>
<td>0.00 %</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>1.85 %</strong></td>
<td><strong>62.26 %</strong></td>
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</table>
## Peer Group Approach: Aracruz

<table>
<thead>
<tr>
<th>Paper &amp; Pulp</th>
<th>Dividend Yield</th>
<th>Dividend Pay Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America</td>
<td>2.86%</td>
<td>41.34%</td>
</tr>
<tr>
<td>Emerging Market</td>
<td>2.03%</td>
<td>22.16%</td>
</tr>
<tr>
<td>U.S.</td>
<td>1.14%</td>
<td>28.82%</td>
</tr>
<tr>
<td>All paper and pulp</td>
<td>1.75%</td>
<td>34.55%</td>
</tr>
<tr>
<td>Aracruz</td>
<td>3.00%</td>
<td>37.41%</td>
</tr>
</tbody>
</table>
Assume that you are advising a small high-growth bank, which is worried about the fact that its dividend payout and yield are much lower than other banks. The CEO of the bank is concerned that investors will punish the bank for its dividend policy. What do you think?

a. I think that the bank will be punished for its errant dividend policy
b. I think that investors are sophisticated enough for the bank to be treated fairly

c. I think that the bank will not be punished for its low dividends as long as it tries to convey information to its investors about the quality of its projects and growth prospects.
Going beyond averages... Looking at the market

- Regressing dividend yield and payout against expected growth yields:
  
  \[ PYT = 0.3889 - 0.738 \text{CPXFR} - 0.214 \text{INS} + 0.193 \text{DFR} - 0.747 \text{EGR} \]
  
  \[ \begin{align*}
  &\text{(20.41)} && \text{(3.42)} && \text{(3.41)} && \text{(4.80)} && \text{(8.12)} \\
  \end{align*} \]
  
  \[ R^2 = 18.30\% \]

  \[ YLD = 0.0205 - 0.058 \text{CPXFR} - 0.012 \text{INS} + 0.0200 \text{DFR} - 0.047 \text{EGR} \]
  
  \[ \begin{align*}
  &\text{(22.78)} && \text{(5.87)} && \text{(3.66)} && \text{(9.45)} && \text{(11.53)} \\
  \end{align*} \]
  
  \[ R^2 = 28.5\% \]

- PYT = Dividend Payout Ratio = Dividends/Net Income
- YLD = Dividend Yield = Dividends/Current Price
- CPXFR = Capital Expenditures / Book Value of Total Assets
- EGR = Expected growth rate in earnings over next 5 years (analyst estimates)
- DFR = Debt / (Debt + Market Value of Equity)
- INS = Insider holdings as a percent of outstanding stock
Disney and Aracruz ADR vs US Market

- **For Disney**
  - Payout Ratio = 0.3889 - 0.738 (0.021) - 0.214 (0.026) + 0.193 (0.2102) - 0.747 (0.08) = 34.87%
  - Dividend Yield = 0.0205 - 0.058 (0.021) - 0.012 (0.026) + 0.0200 (0.2102) - 0.047 (0.08) = 1.94%
  
  Disney is paying out too little in dividends, with its payout ratio of 32.31% and its dividend yield of 0.91%.

- **For Aracruz ADR**
  - Payout Ratio = 0.3889 - 0.738 (0.02) - 0.214 (0.20) + 0.193 (0.31) - 0.747 (0.23) = 21.71%
  - Dividend Yield = 0.0205 - 0.058 (0.02) - 0.012 (0.20) + 0.0200 (0.31) - 0.047 (0.23) = 1.22%
  
  Aracruz is paying out too much in dividends, with its payout ratio of 37.41% and its dividend yield of 3%.
Other Actions that affect Stock Prices

- In the case of dividends and stock buybacks, firms change the value of the assets (by paying out cash) and the number of shares (in the case of buybacks).
- There are other actions that firms can take to change the value of their stockholder’s equity.
  - *Divestitures*: They can sell assets to another firm that can utilize them more efficiently, and claim a portion of the value.
  - *Spin offs*: In a spin off, a division of a firm is made an independent entity. The parent company has to give up control of the firm.
  - *Equity carve outs*: In an ECO, the division is made a semi-independent entity. The parent company retains a controlling interest in the firm.
  - *Tracking Stock*: When tracking stock are issued against a division, the parent company retains complete control of the division. It does not have its own board of directors.
Differences in these actions

- Asset completely converted into cash
  - Divestitures
  - No cash for transaction

- Control fully lost
  - Divestitures
  - Spin offs
  - Parent company preserves control

- Taxed on capital gains
  - Divestitures
  - ECOs
  - Tracking stock
  - Spin offs

- Bondholders negatively affected
  - Divestitures
  - Spin offs
  - ECOs
  - Tracking stock
  - Bondholders unaffected

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