Corporate Finance

Lecture 9: Dividend Policy

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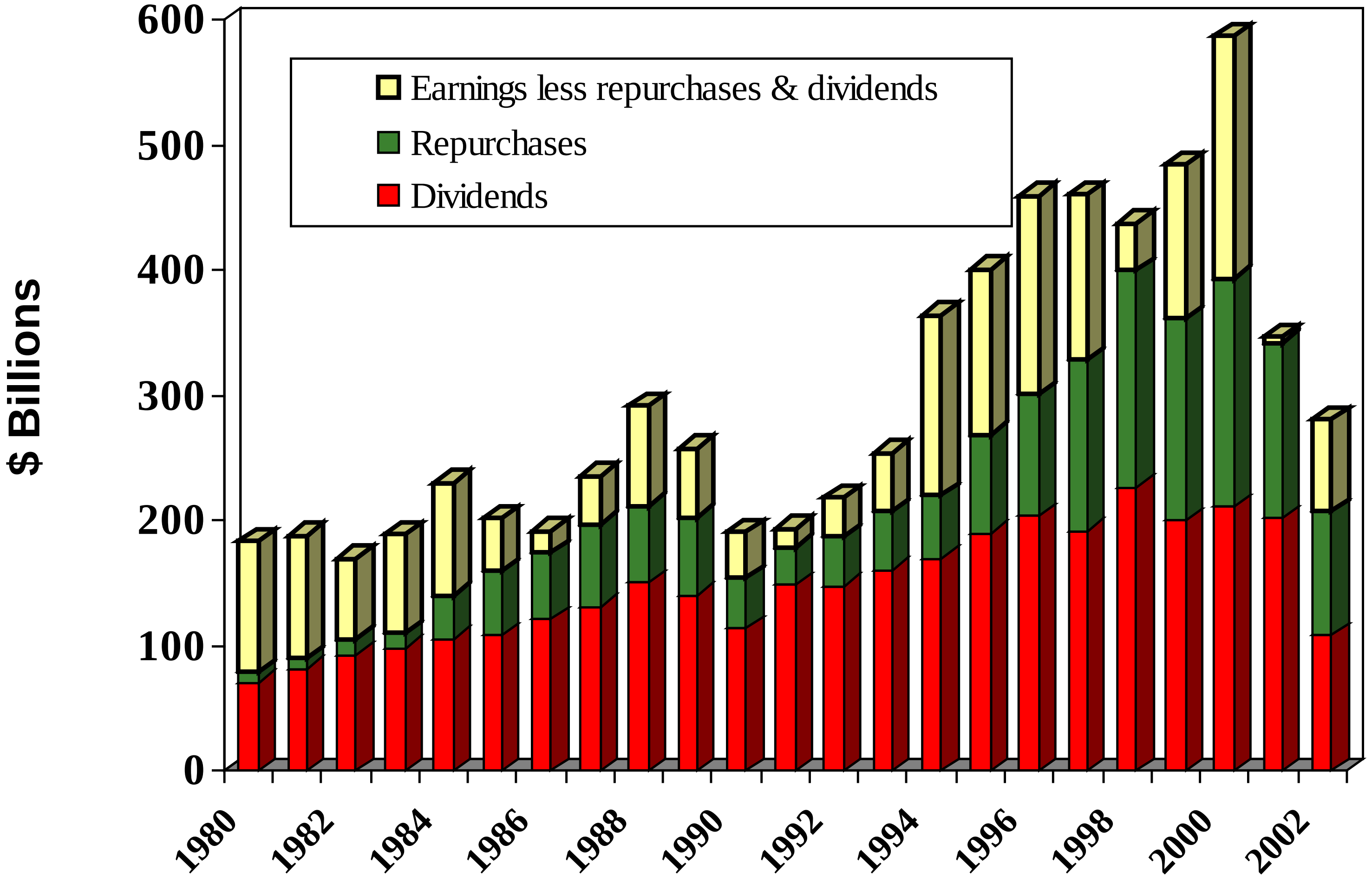
Payout Policy

- Companies can hand back cash to shareholders by…
  - Paying dividends
  - Repurchasing stock
- Here, we hold capital budgeting and borrowing decisions constant

Dividend & Stock Repurchases

U.S. Data 1980 - 2002



Modigliani-Miller theorem, again!

Choice of paying dividends or repurchasing stock is irrelevant for shareholders in the absence of…

- Arbitrage opportunities
- Taxes
- Transaction costs
- Information problems

and if the investment, financing and operating policies are held fixed (the firm knows how much to redistribute).

Proof

- Companies DiV and ShP…
  - will be worth the same (uncertain) amount at the end of year (after dividends and stock rep), $Xm (uncertain at the beginning of the year, but for sure between $100m and $200m)
  - each has today 1m shares outstanding
- However, at the end of the year…
  - Div will pay $10m in dividends
  - Shp will repurchase stock worth $10m
- What is the future value of a share (plus dividends)?

Proof (2)

- What is the value of a share of company DiV at the end of the year?
- What is the value of a share of ShP?
  - Need to find how many shares it will repurchase (N) and which will be the price (S)
  - How many shares will it repurchase for $10m?
  - What should be the value of the share?
- Why should the initial price be the same?

Effects of Taxes

- In the classical taxation system…
  - Companies pay corporate taxes on earnings
  - Shareholders’ dividends are taxed as ordinary income (max 40% in US)
  - Shareholders’ capital gains are taxed at a lower rate (max 20% in US)
- Different taxation levels and systems around the world

How Taxes Affect Dividend Policy

- Indifference between pretax distribution through stock rep or dividends. However,
- *Immediate* tax liability substantially higher for dividends:
  - Higher rate
  - All gains are immediately taxed
- *Future* tax liability is lower for dividends because capital gains will be lower
- However, the total amount paid in taxes (and its present value) will be higher for dividends

How Transaction Costs Affect Dividend Policy

- Tax-exempt shareholders (e.g. pension funds and university endowments) may prefer dividends, because of transaction costs:
  - Brokerage fees for share repurchases
  - Registration costs for share repurchases
- Moreover, corporations that hold shares of other corporations may prefer dividends because they are taxed at a lower rate

- Summarising, firms may have different payout ratios to appeal different investor clienteles

How Dividend Taxes Affect Financing and Investment Choices

- Taxes and transaction costs may also distort investment and financing choices
- For example, tax-paying shareholders may prefer that the company invests generated income rather than paying it out
  - If paid out, shareholders can only invest after-personal-tax money
  - If not, interests also earned on the pre-tax money