Payout Policy

Advanced Financial Management

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Overview

- Definitions and facts

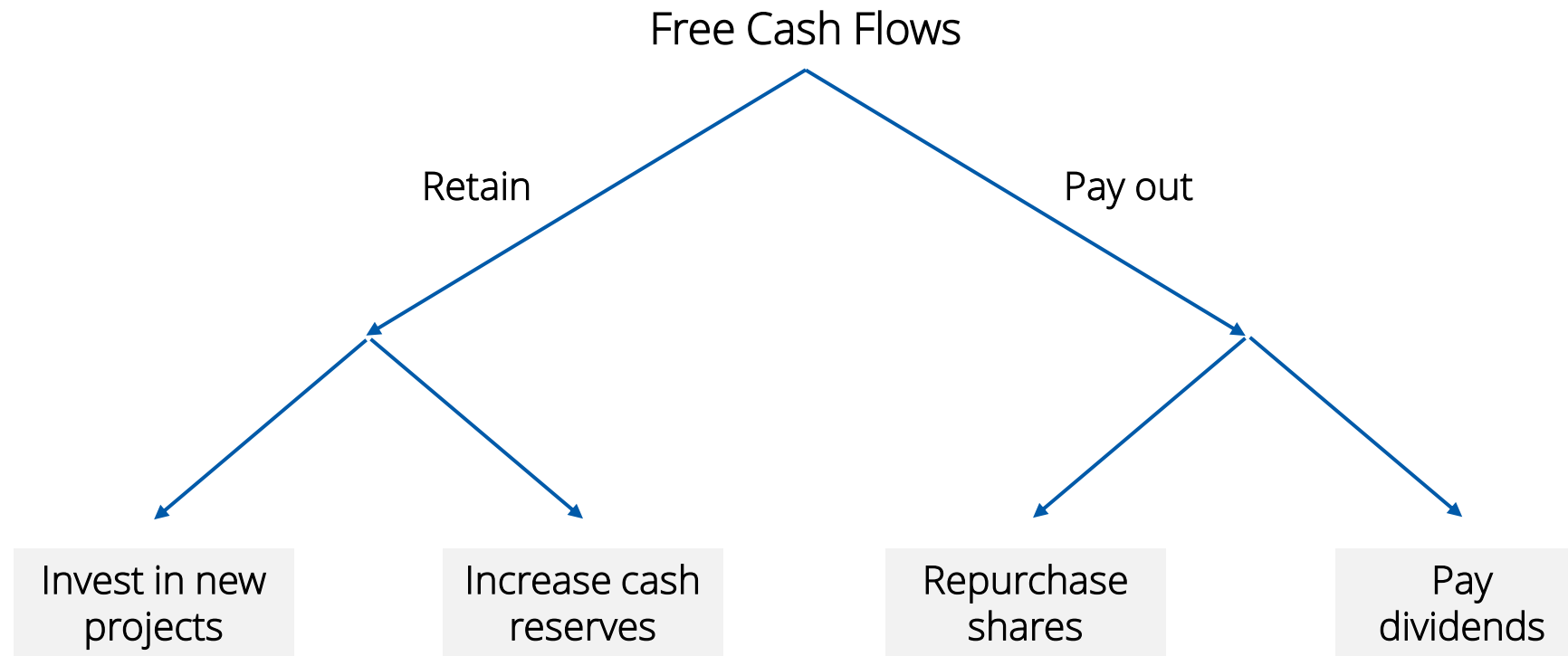- Payout Policy Irrelevance

- Why is dividend policy relevant?

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Definitions and facts

Payout Policy

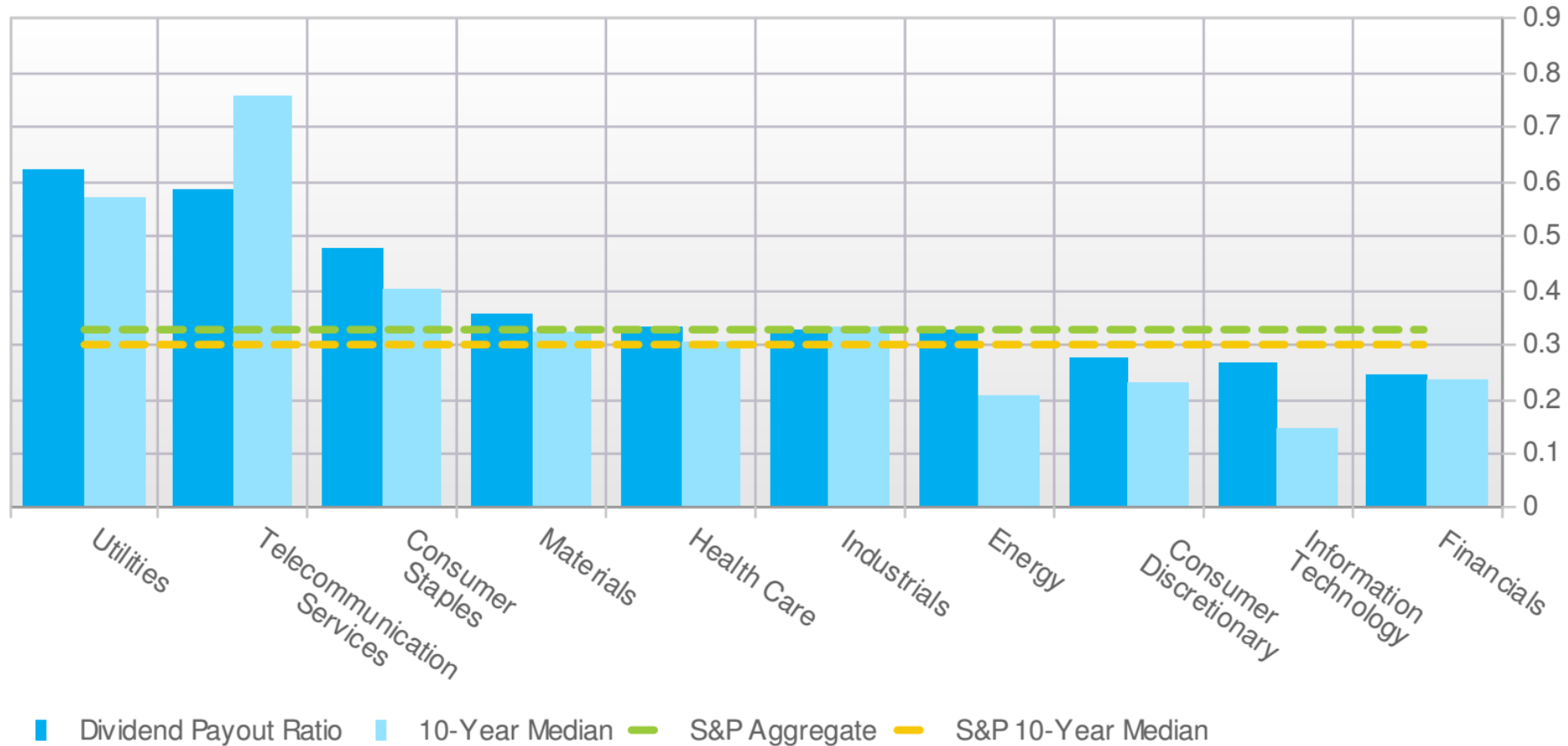Payout Policy is the way in which a firm decides how to distribute free cash flows to shareholders.

Payout options

Policy	Types	Details
Dividends	**Cash Dividend:** Firm pays cash to shareholders on a pro-rata basis, e.g. shareholders receive $0.50 in cash for each share held.	▪ Regular cash dividend (quarterly, semi-annual) ▪ Special cash dividend (one-off)
	Stock Dividend: Firm pays additional stock to shareholders on a pro-rata basis, e.g. 10% stock dividend means shareholders receive 10 shares for every 100 held.	▪ No actual transfer of cash to shareholders ▪ Essentially a stock split with a much smaller split factor
Share repurchase Firm uses cash to purchase its own stock from shareholders.	Open market repurchase (most common)	▪ Firm purchases shares in the open (i.e. secondary) market anonymously. ▪ Usually lasts up to 3 years
	Tender offer	▪ Firm pre-specifies the number of shares and the price which it will offer ▪ The offer price is normally at a premium to the current price (typically 10-20%).

Dividend Payout ratio by Industry

S&P 500, 2005-2015

Source: Factset

Payout Policy Irrelevance

Modigliani & Miller Payout policy Irrelevance

Modigliani and Miller (1958) showed that under the following assumptions ("perfect capital markets"):

1. Investment is held constant
2. No transactions costs
3. Efficient capital markets
4. Managers maximise shareholders' wealth
5. No taxes (or, no differential tax)

> The payout policy does not affect the value of the firm and the wealth of shareholders.

MM Payout Irrelevance

Example

Suppose D&R has FCF of €50 million every year in perpetuity starting next year, 10 million shares and excess cash of €20 million. Assume unlevered cost of capital of 10%.

Also assume firm pays FCF as future dividends every year.

D&R is considering 3 possible payout strategies:

1. Pay out all of its excess cash as a dividend now. Div per share = €20M/10M = €2

2. Use excess cash to repurchase shares

3. Issue equity to pay high dividend today

Initial Balance Sheet

$A = \frac{50}{0.1}$ $= €500M$	E = Equity
	$= €520M$
Cash = €20M	

Initial Price:

$$P = \frac{E}{N} = \frac{520}{10} = €52$$

MM Payout Irrelevance

Policy 1

Pay out all of its excess cash as a dividend now. Div per share = €2

The initial price is also the PV(all dividends) or the cum-dividend price (= P^{ex} + current dividend).

Future dividends will be:

$$Div = \frac{€50M}{10M} = €5$$

Initial Price:

$$P = €2 + PV(future\ div) =$$
$$= €2 + \frac{€5}{0.1} = €52$$

Policy 2

Use excess cash to repurchase shares

The firm will repurchase at the initial share price, thus repurchases

$$n = \frac{€20M}{€52} = 0.385M$$

Then, the firm will have 10 – 0.385 = 9.615M shares.

And future dividends will be:
$$Div = \frac{€50M}{9.615M} = €5.2$$

Initial Price:

$$P = 0 + PV(future\ div) =$$
$$= \frac{€5.2}{0.1} = €52$$

Policy 3

Issue equity to pay high dividend today

The firm wants to start paying €50M now and will issue equity to fund the current dividend.

The firm needs €30M and will issue:

$$n = \frac{€30M}{€52} = 0.577M$$

The firm will have 10.577M shares.
And all dividends are:

$$Div = \frac{€50M}{10.577M} = €4.73$$

Initial Price:

$$P = €4.73 + \frac{€4.73}{0.1} = €52$$

MM Payout Irrelevance

	Initial Price	Dividend Paid		
		Year 0	Year 1	Year 2
Policy 1	€52	€2	€5	...
Policy 2	€52	€0	€5.2	...
Policy 3	€52	€4.73	€4.73	...

Post Balance Balance Sheet

$A = \frac{50}{0.1}$ = €500M	E = Equity = €500M

Ex-dividend Price:

Policy 1: $P = \frac{€500M}{10M} = €50$

Policy 2: $P = \frac{€500M}{9.615M} = €52$

Policy 3: $P = \frac{€500M}{10.577M} = €47.3$

- All three policies have the same initial price. This means that the present value of all three policies is the same for the shareholder.

- Shareholders should be indifferent between the 3 policies.

- The wealth of shareholders is the same in all 3 policies. Wealth from 1 share is the dividend received plus the value of the share:
  Policy 1: €2 + €50 = €52
  Policy 2: €0 + €52 = €52
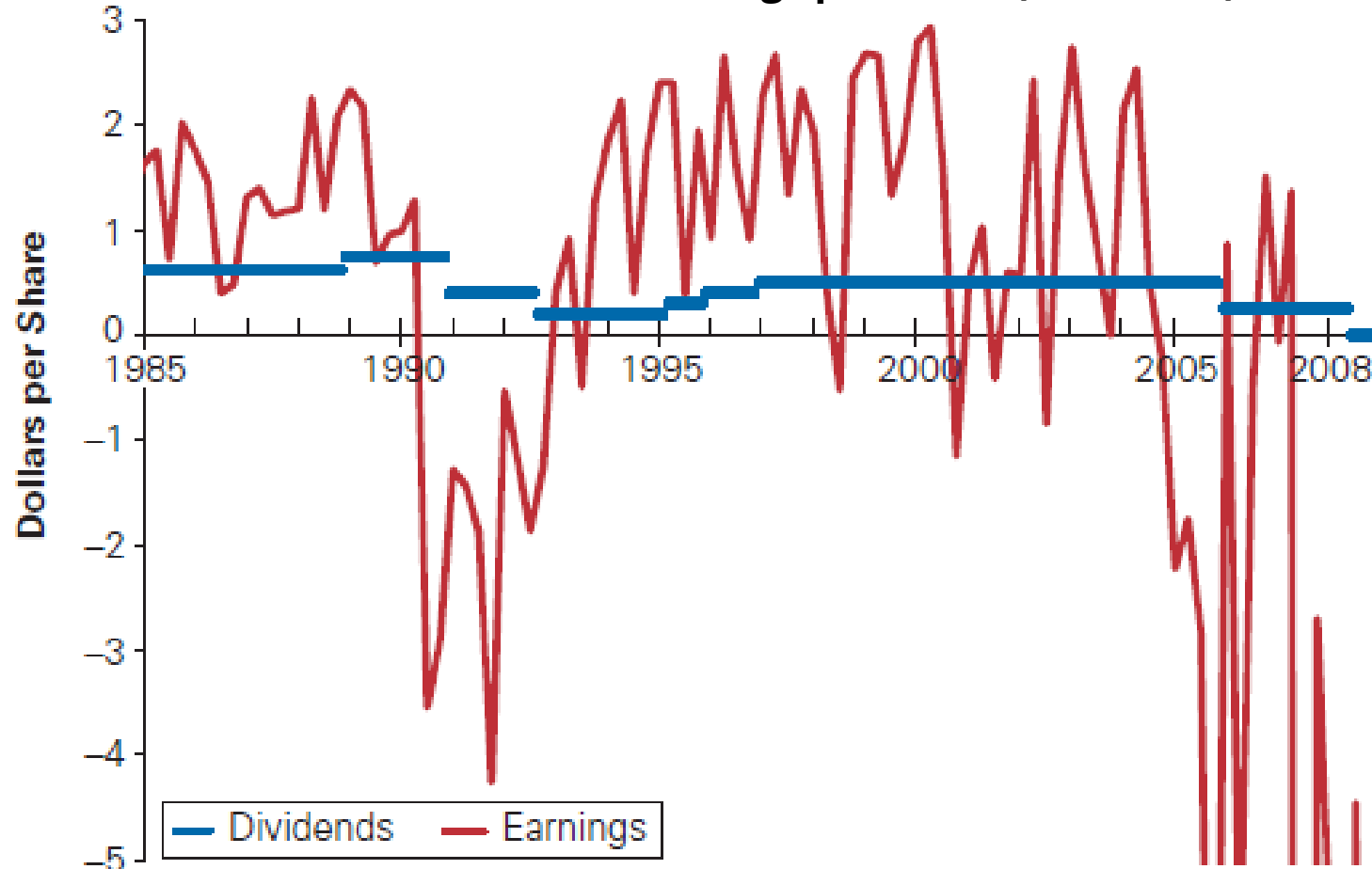 Policy 3: €4.73 + €47.3 = €52

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Why is dividend policy relevant?

Dividend Smoothing

GM's dividends and earnings per share (1985-2008)

- Firms vary the size of their dividends very infrequently

- Dividends are much less volatile than earnings

Determinants of Dividends – Asymmetric information

Managers' beliefs and behaviours

- Managers' beliefs about information in payout decisions
  - Over 80% of managers say that dividend and repurchase decisions convey information to investors.
  - 88% believe there are negative consequences to reducing dividends. There is no similar belief around repurchase decisions.

- Dividend smoothing
  - Management believes that investors prefer stable dividends with sustained growth
  - Thus, firms raise their dividends only when they perceive a long-term sustainable increase in the expected level of earnings.

Theories

- Dividend signalling hypothesis:
  - When a firm increases its dividend it sends a positive signal to investors that management expects to be able to afford the higher dividend for the foreseeable future.
  - When a firm decreases its dividend it may signal that management has given up hope that earnings will rebound in the near term.

- Mixed Signals? Perhaps.
  - When a firm increases its dividend, it might instead signal a lack of investment opportunities.

Determinants of Dividends – Other

Tax Preferences	**Precautionary motives**
▪ The preference for a payout policy depends on the difference between the dividend tax rate and the capital gains tax rate.	▪ Other financing frictions could lead to precautionary or transactional cash holding motives
▪ E.g., much lower taxes on capital gains leads to a strong preference for buybacks over dividends.	▪ Keep cash if external financing is very costly or investment opportunities are fleeting (e.g., R&D, acquisition opportunities).

Evidence from a survey (Brav et al 2005)

Survey of 384 financial executives (256 public, of which 166 pay dividends, 167 repurchase shares, and 77 do not pay out).

- Maintaining the dividend level is a priority on par with investment decisions. The same is not true for buybacks.
  - Managers express a strong desire to avoid dividend cuts, except in extraordinary circumstances.
  - Would rather raise external funds than cut dividends

- Beyond maintaining the level of dividends per share, payout policy is a second-order concern:
  - increase in dividends are considered only after investment and liquidity needs are met.

- Two reasons dominate why nonpayers might initiate dividends:
  - a sustainable increase in earnings
  - demand by institutional investors.

- Tax treatment matters, but is not a top consideration.

Key takeaways

01 **Understand what payout policy is.**

02 **Understand payout policy irrelevance under the assumptions of Modgliani and Miller model.**

03 **Recognize reasons why payout policy may affect value of the firm**