UNIVERSITY OF CALGARY
HASKAYNE SCHOOL OF BUSINESS

Corporate Finance

Dividend Policy

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Agenda

Dividend policy and payouts to shareholders

- Dividends
- Share repurchase programs

Theories of dividend payouts

- Irrelevance and relevance of the dividend policy
- The tax-preference argument
- Signaling
- Agency costs
- Desire for current income
- Behavioral factors

Empirical evidence

Summary: Factors to consider for a payout policy

Chapter 19 of the textbook

Dividend policy and payouts to shareholders

The four pillars of corporate finance

- **Capital budgeting**
  - Select value-creating projects
- **Capital structure**
  - Optimize the cost of capital
- **Dividend policy**
  - Pay cash to shareholders (i.e.return capital)
- **Capital raising**
  - Obtain additional capital

Dividend policy

- "The payout policy that a firm follows in determining the size and pattern of distributions to shareholders over time." as determined by the Board of Directors from time to time and implemented by management.

Dividend policy and payouts to shareholders

Dividends

- Cash dividends
  - the 'regular dividend' is paid in cash, typically quarterly
  - sometimes, a special cash dividend is paid (kind of rare nowadays)
- Stock dividend (simply increases the number of shares outstanding)
- Stock split (e.g. 2:1 get you one new share for each share you own)
- Reverse stock split (e.g. 1:2 leave you with one share for each two shares)
- If the firm is being winded-down, it might give rise to a liquidating dividend to distribute leftover cash (if any).

Share repurchase programs (aka stock buybacks, in vogue since the 1980s)

- Firm buys its shares back from its shareholders
- Open market repurchase or tender offer
- Used as a pro-cyclical top-off to distribute excess cash to shareholders.

Spin-offs

- A portion of the firm becomes a distinct legal entity which shares are distributed to shareholders (a sort of payment in kind).

Timeline of a cash dividend payment (an administrative issue)

Declaration date

- Date the Board of Directors declares the dividend (same, up or down?).

Record date (aka holder-of-record day)

- Date at which the list of shareholders entitled to the dividend is final.

With-dividend date (3 days before the record date)

- The last day upon which an investor buying the stock is still entitled to the dividend.

Ex-dividend date (2 days before the record date)

- The first day upon which an investor selling the stock will nevertheless receive the dividend (i.e. first day the buyer does not get the dividend);
- The share price is expected to drop by about the dividend at the start of trading over last close (as the dividend is no longer included in the price).

Payment date

- The date the dividend is paid.

Dividend yield and dividend payout ratio

The dividend yield expresses the dividend as a percentage of the share price.

$$Dividend\ yield = \frac{Annual\ dividends}{Share\ price}$$

$$Total\ return = Dividend\ yield + Capital\ gain\ (or\ loss)$$

The dividend payout ratio expresses the dividend as a percentage of earnings.

- Negative earnings lead to a negative dividend payout ratio (retention ratio then exceed 100%).

$$Dividend\ payout\ ratio = \frac{Annual\ dividends}{Annual\ earnings}$$

$$Retention\ ratio = 1 - Dividend\ payout\ ratio$$

Of note, as per a later slide, in aggregate, firms return more nowadays under the form of stock repurchases than cash dividends. So, the above ratios might be less relevant now than in the past.

Share repurchase programs (why)

Typically **in addition to, and not as a substitute to regular cash dividends**, firms can instigate programs to repurchase shares from shareholders.

- By doing so, cash is returned, paid-out to shareholders (to those who need it).
- By being 'one-off', not as strong a signal as increasing the regular dividend.
- Can be used to alter the capital structure of the firm (borrow, then pay-out).
- Shareholders benefit if taxation of shares having been bought back (e.g. resulting in a capital gain or delaying it) is lower than taxation of dividends, plus having the ability to time your capital gain.
- It reduces the number of shares outstanding, may increase stock price and EPS.
- Could be used to offset dilution resulting from exercise of stock options provided by the firm (a controversial rationale).
- Executive compensation might be (positively) influenced by such buybacks (easier to meet per share targets).
- Could signal that the stock is undervalued, will transfer wealth from selling to non-selling shareholders (and vice-versa).
- Could signal the firm lacks positive NPV projects (negative or positive signal).
- **Has become quite common.**
- Empirical evidence suggests that long term returns for firms having implemented a buyback program are higher than for those which have not done so.

Share repurchase programs (how to)

In most jurisdiction, share repurchase programs are regulated.

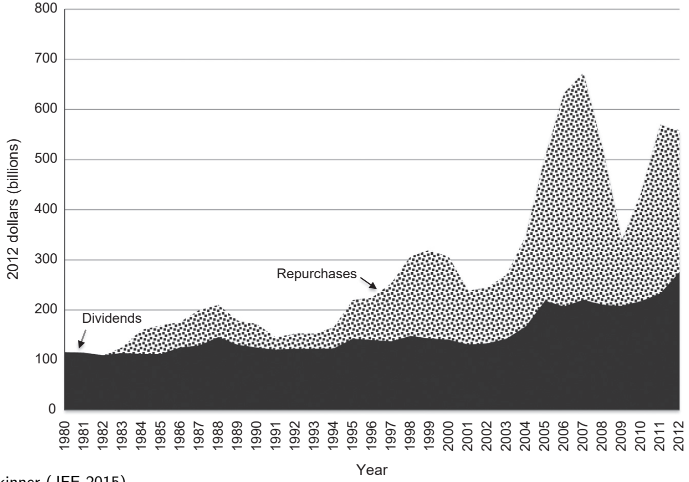
- Notably, a share repurchase program has to be announced/communicated to shareholders with sufficient details.

Several methods can be used to implement such buy-back programs.

- Open market share repurchase ($\sim$90% of all repurchases)
  - firm buys at its discretion, up to a daily limit at market price, and up to a pre-announced amount.
- Fixed-price tender offer
  - firm chooses the price, the number of shares, and the duration of the offer; shareholders respond at their own discretion.
- Dutch auction
  - firm announces a price range; shareholders respond at their own discretion; firm buys shares at a single price from all tenders up to that price (or pro-rata up to the single price).
- Sometimes a specific shareholder is bought-out (typically a large block).

Regular dividends versus share repurchases evidence

Real aggregate dividends and repurchases for US industrials (2012 constant dollars, in billions).



Source: Floyd, Li, and Skinner (JFE 2015)

Irrelevance and relevance of the dividend policy

Up to the 1960s, dividends were viewed as important determinant of firm valuation (i.e. higher dividend payout lead to higher stock valuation).

- The **bird-in-the-hand argument** (better than 'in-the-bush').

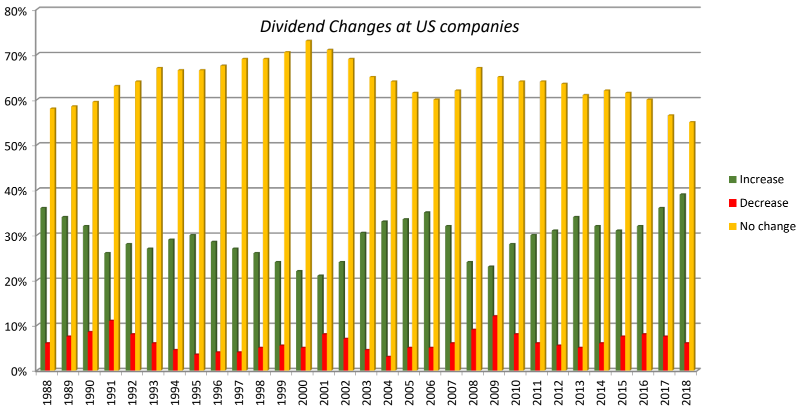
With the usual assumptions, Modigliani and Miller (JoB 1961) exposed that **dividend policy** (i.e. how much dividend to pay out of current earnings/cash flow) **is irrelevant since shareholders can create 'homemade dividends'** (i.e. selling shares for cash as a substitute to receiving cash dividends). Also called the residual dividend theory.

- Payout all excess cash after funding all positive NPV projects (rarely observed).

But **when market imperfections are considered** (e.g. taxes, asymmetric information, agency costs, transaction costs, behavioral considerations), **dividends matter**.

- Shareholders generally prefer high dividends as long as such high dividends are sustainable (it explains why firms smooth their dividends);
- As a result, management is likely to increase the regular dividend only if the firm can sustain the increased level over time, therefore shareholders are likely to interpret such decision as positive news, and vice versa (i.e. negative news if dividend is cut or 'suspended').
  - News affect stock prices... and a change in dividend is news.

Empirical evidence regarding regular dividends



Source: Damodaran using Standard & Poor's data

In a given year most firms leave their dividend unchanged, ruling out management using a constant dividend payout ratio or a residual dividend policy. Firms are much more likely to increase dividend than decreasing it, but such likelihood is correlated with the business cycle (e.g. 2009).

Theories of dividend payouts

The tax-preference argument

- Often capital gains are taxed at a lower rate than dividends.
- It can create a 'clientele effect', as their individual tax situation vary one shareholder to the other, some might find it beneficial to choose stocks to invest in according to their tax circumstances.

Clientele	Preference for dividend
High tax paying individuals (e.g. doctors, dentists)	Zero or low payout
Low tax paying individuals (e.g. retirees)	Low to medium payout
Tax-exempt entities (e.g. pension funds, endowments)	Medium to high payout
Corporations	High payout

Theories of dividend payouts (cont.)

Signaling

- Increasing dividend is management's signal that the firm could be expected to do well (a credible signal reduces asymmetric information).
- So, firms tend to smooth-out dividends by setting long-run targets of payout ratios within a range, resulting in dividends lagging earnings.

Agency costs

- High dividend payout discipline managers (i.e. have less excess cash to squander, must raise funds more often leading to more scrutiny).

Desire for current income

- Transaction costs deter investors from selling shares to generate income while receipt of dividends do not entail transaction costs.

Behavioral factors

- Investors are aware of possible lack of self control, and as a response prefer to keep the number of shares owned as constant (i.e. get some value out of the illusion of never dipping into the principal).

Theories of dividend payouts (cont.)

Firm life-cycle theory, Muller (JIE 1972), Damodaran (1999)

- When a firm matures, its ability to generate cash starts to exceed its ability to find positive NPV projects.
- Pattern of dividends changes over the life-cycle of the firm.
  - No dividends during the rapid expansion stage;
  - Pay or increase dividends during the mature growth phase;
  - Special dividends or repurchase shares during the declining stage.
- Empirical evidence, Fama and French (JFE 2001)
  - Dividend-paying firms have characteristics of mature firms;
  - Non-dividend-paying firms have characteristics of young, fast-growing firms.

The catering theory, Baker and Wurgler (JOF 2004)

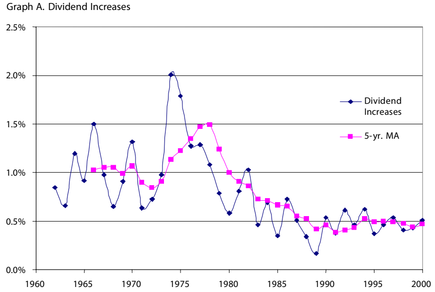
- Investor sentiment influences dividend policy decisions.
- When investor sentiment favors high-dividend paying firms, then management increases dividends, and vice-versa.

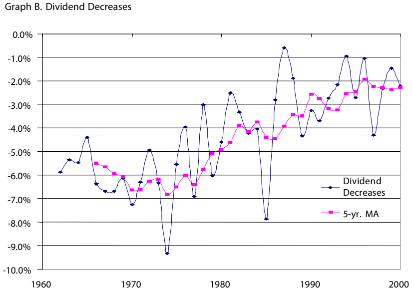
Survey evidence of dividend theories

Study	Bird-in-the-hand	Residual theory	Taxes and clientele	Agency	Signaling	Life cycle
Baker & al. (1985)			Mixed		Supported	
Baker & Farrelly (1988)					Supported	
Baker (1989)			Inconclusive			
Farrelly & Baker (1989)			Supported		Supported	
Baker & Powell (1999)	Mixed	Mixed	Mixed	Mixed	Supported	Supported
Abrutyn & Turner (1991)			Little support	Some support	Most support	
Baker & al. (2002)	Not supported	Mixed	Little or no support	Little or no support	Supported	Supported
Brav & al. (2005)			Little support	Little support	Little support	
Baker & Smith (2006)		Not supported				

Source: adapted from Baker & al. (2011) Signaling and life cycle get the most support, then agency, and it is not the case for the rest.

Empirical testing of the signaling theory





- Several empirical studies document positive (negative) abnormal return following the announcement of an increase (decrease) in dividends, providing support to the signaling theory of dividends.
- However, as shown above by Amihud & Li (JFQA 2006), the market response to the signal has been decreasing, possibly explained by the increased preeminence of institutional investors who are better informed than retail investors, and are therefore better equipped to anticipate the signal.

Brav & al. (JFE 2005)

Observations

- Managers make dividend decisions conservatively and are reluctant to cut dividends;
- Dividends are sticky, inflexible, and smoothed through time;
- The most common target is the level of dividend, followed by the payout ratio and growth in dividend;
- Dividends increases are related to permanent, stable earnings;
- Tax disadvantage of dividends is of second-order importance;
- Dividends convey information.

Apparent rules of thumb followed by management

- Do not cut dividends;
- Have a dividend policy similar to your peer group;
- Preserve a good credit rating;
- Maintain flexibility;
- Do not take actions that reduce earnings per share.

Source: adapted from Baker & al. (2011) and Damodaran (2015)

Factors to consider for a payout policy

From a finance perspective, the life cycle stage of a firm can be investigated by comparing the magnitude and quality of the net cash flow from its existing operations with the magnitude and quality of its portfolio of real options.

- If the net cash flow from operations is insufficient to support the exercise of real options, the firm should not return capital to shareholders;
- As long as the ability of existing operations to support the exercise of the real options is uncertain, the firm should not initiate returning capital;
- If the net cash flow from operations is more than sufficient to fund the exercise of real options, then the firm should return some excess capital;
- If returning capital to shareholders endanger the viability of the firm (e.g. prolonged negative cash flows), then capital should not be returned;
- The degree of financial flexibility needed shall reflect the portfolio of real options while such flexibility can be preserved by using a balanced mix of regular dividends and share buybacks.
- All other factors alluded to shall be taken into consideration, somewhat.
- Support from existing cash flow means providing a significant portion of the funding for new projects, but not necessarily all of it.

Chapter 19 of the textbook

Textbook sections covered

- 19.1 to 19.11

Worked examples

- Two worked examples are provided in chapter 19 of the textbook.

Exercises

- 22 exercises are provided in chapter 19 of the textbook.
- You should practice your Excel skills with a few of those.
- Suggest 19.11 and 19.13
- Hints
  - 19.11: \$35.46
  - 19.13: a) \$53+\$5=\$58, b) 35.3, c) a share repurchase offers a choice to shareholders while a dividend does not

19.11 Solution

Nb. shares	1000	
D1	0.95	
D2	45	
Re	14%	
NPV	$35.46	
pmt (two)	$21.53	
PV t=1 of D2	$39.47	
CF 1 & 2	$21,534.11	
CF D1	$950.00	
Sell at t=1	$20,584.11	
Sell at t=1	521.46	shares

19.13 Solution

a)	CF0	3,000	
	EPS1	$1.50	
	Price0	$58.00	
	Nb. shares	600	
	Dividend	$5.00	
	Price post D	$53.00	
	Share repur.	51.72	same share price

Same wealth (all shares, combination or all cash)

		P	E	P/E
b)	Dividends	$53.00	1.50	35.3
	Repurchase	$58.00	1.64	35.3