

Corporate Finance

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Session 5 – 27.04.2015

Returning Money to Shareholders

Dividends, Buybacks and the Payout Policy

Dividend Policy

Analyze the circumstances when dividend policy is irrelevant

Examine dividend policy in a classical taxation system and an imputation tax system

Summarize the main factors affecting dividend policy

Cash Dividends

Regular cash dividend: cash payments made directly to stockholders,

Extra cash dividend: indication that the “extra” amount may not be repeated in the future

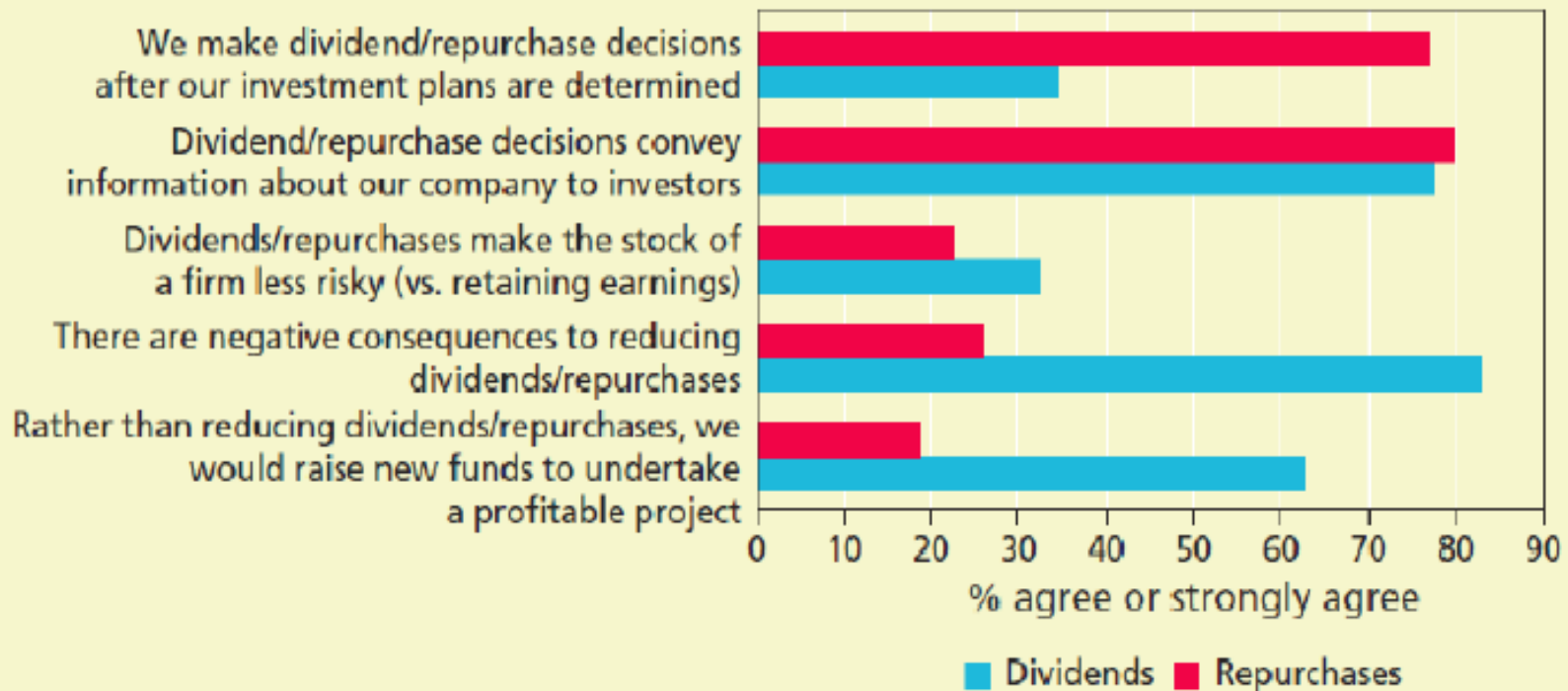
Special cash dividend: similar to extra dividend, but definitely won't be repeated

Liquidating dividend: some or all of the business has been sold

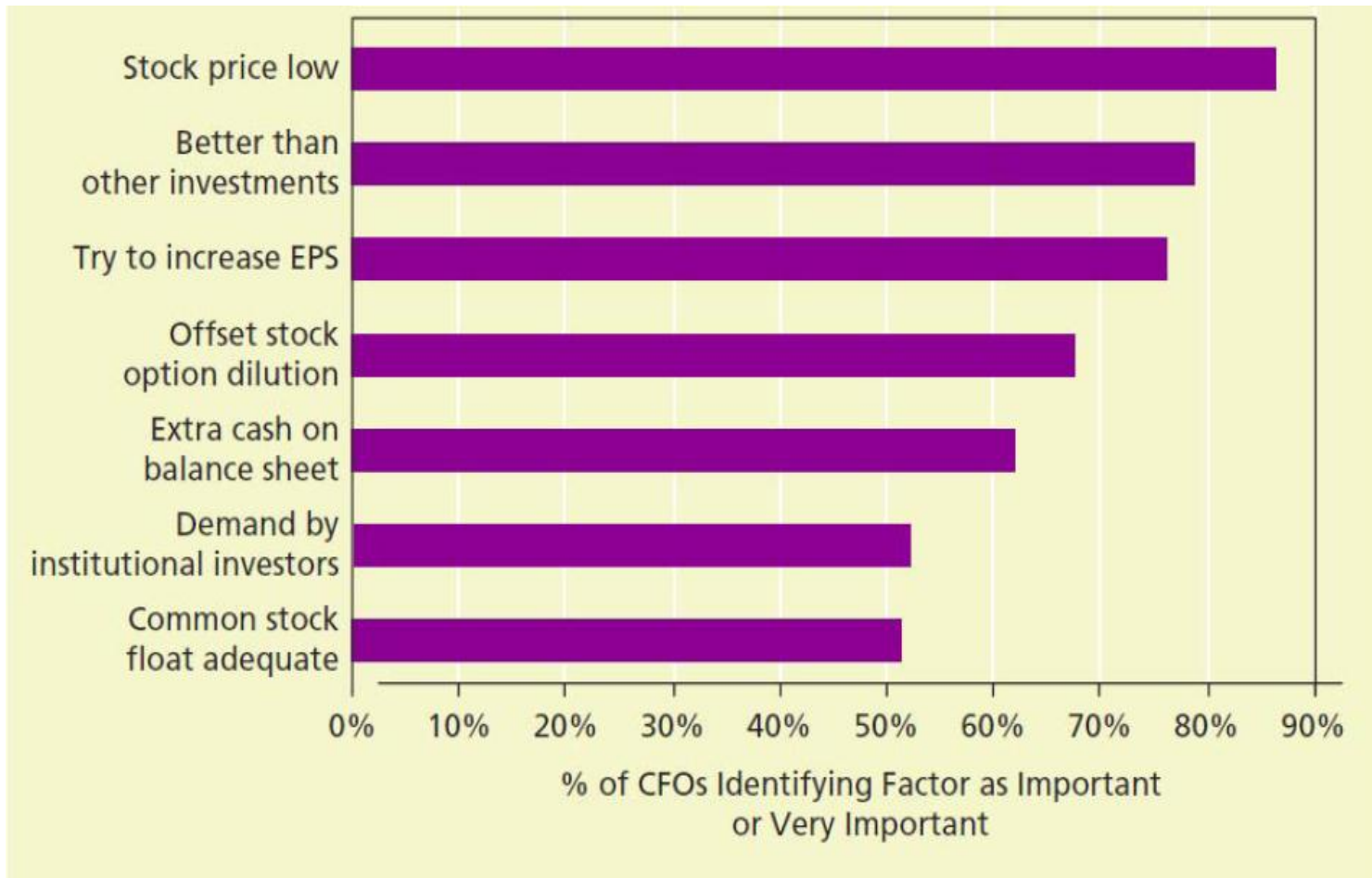
CFOs' views on Dividends and Repurchases

CFOs were asked: "Do these statements agree with your company's views?"

Responses from Dividend Payers and Repurchasers



Important Factors in the decision to repurchase Shares



Institutional Features of Dividends

Dividend declaration (or announcement) date

Ex-dividend date, which is 4 (?) business days before the record date

Record (or books closing) date

The date on which shareholders of record receive the announced dividend
This gives brokers time to notify the share register and ensure that the new shareholders receive the dividend

Payment date

Date dividend is mailed or paid electronically

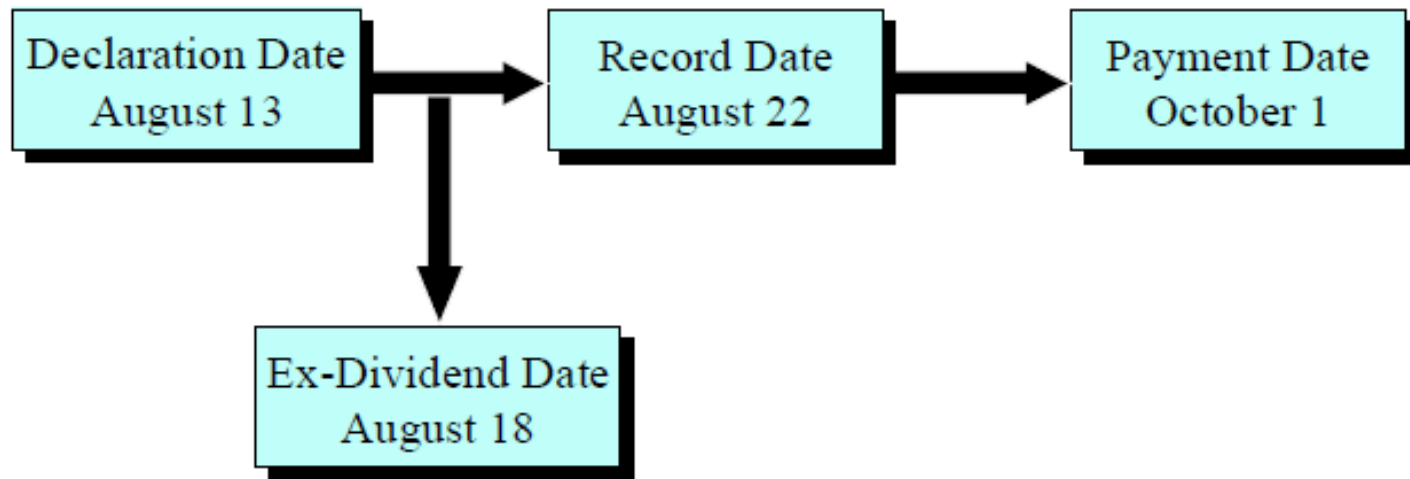
Institutional Features of Dividends

Interim and final dividends announced by the Commonwealth Bank (ASX code: CBA) in 2008

\$1.13 interim dividend announced	13 February 2008 (Wednesday)
Ex-dividend date	18 February 2008 (Monday)
Record date	22 February 2008 (Friday)
Interim dividend payment date	2 April 2008 (Wednesday)
\$1.53 final dividend announced	13 August 2008 (Wednesday)
Ex-dividend date	18 August 2008 (Monday)
Record date	22 August 2008 (Friday)
Final dividend payment date	1 October 2008 (Wednesday)

Source: CBA's website at shareholders.commbank.com.au

Institutional Features of Dividends



The **final dividend** of \$1.53 **declared** by CBA on **August 13** is payable on **October 1** to shareholders of **record at August 22**

The ex-dividend date is **4 business days (?)** before the record date

Stock trades without the dividend (“**ex dividend**”) from August 18 onwards

It trades with the dividend (“**cum dividend**”) up to and including August 17

What will happen to the price of shares on **the ex-dividend date?**

Dividend Payout Policies

Pure residual dividend policy

Pay out any earnings that the firm **does not need to reinvest**
Dividends and dividend payout ratios **tend to be unstable**

Smoothed (or fixed) dividend policy

Target a proportion of earnings to be paid out as dividends

Objective here is for the dividends **to equal** the long run **difference** between **expected earnings** and **expected capital expenditures** - Stable dividends over time

Constant payout dividend policy

Pay a **constant** proportion of earnings as dividends
Stable **dividend payout** ratio but **unstable dividends**

MM and the Dividend Irrelevance Theory

The main assumptions underlying the irrelevance theory are...

Perfect capital market

The firm can issue and sell new shares when needed

No personal taxes

The firm is all equity financed

The firm has a given investment plan which is not affected by changes in dividends

Firm value is determined only by what earnings are generated by the firm's assets

The manner in which the earnings stream is divided between dividends and retained earnings **does not** affect shareholders' wealth

MM and the Dividend Irrelevance Theory

Recall that the price of ordinary shares is...

$$P_0 = (D_1 + P_1)/(1 + k_e)$$

Since the price at time 1 depends on the dividend in time 2, and so on, we get...

$$P_0 = \sum_{t=1}^{\infty} \frac{D_t}{(1 + k_e)^t}$$

The puzzle...

If the price today depends on the stream of future dividends how can a **firm's dividend policy be irrelevant?**

Investors **should care** about how much of earnings are paid out as dividends!

MM and the Dividend Irrelevance Theory

Dividend policy is a **trade-off between...**

Retaining profits, versus

Paying dividends and issuing **new share issues** to replace the dividends paid out

The **overall effect** of paying a dividend and issuing new shares to replace the cash is...

No change in the value of the firm

No change in the wealth of the old shareholders

The value of their shares **will fall** by an amount **equal** to the cash paid to them

MM and the Dividend Irrelevance Theory

<i>Sources of funds</i>	
Cash from operations	X
Cash from <i>new</i> shares issued (Number of shares = m)	mP_1
<i>Uses of funds</i>	
Dividends paid (Number of shares = n)	nD_1
Investments	I

Since the sources and uses of funds must be equal, we have...

$$X + mP_1 = nD_1 + I$$

$$\text{Alternatively, } mP_1 = nD_1 + I - X$$

MM and the Dividend Irrelevance Theory

If the firm has n shares outstanding, the value of the firm is...

$$V_0 = nP_0 = (nD_1 + nP_1)/(1 + k_e)$$

To replace the dividend paid out (nD_1), the firm sells m new shares at a price of P_1 each...

$$V_0 = [nD_1 + (n + m)P_1 - mP_1]/(1 + k_e)$$

Substituting for $mP_1 = nD_1 + I - X$ in the above expression, we get...

$$V_0 = [(n + m)P_1 - I + X]/(1 + k_e)$$

Note that D_1 does not appear in the above equation so dividend policy is irrelevant to firm value

MM and the Dividend Irrelevance Theory

Illustration:

TXT Ltd has 1,000,000 shares outstanding, and its current market price is \$5.00. Assume that the firm operates in a perfect capital market and is considering paying a dividend of \$0.50 per share one year from now. The required rate of return on its shares is 10% p.a. and cash from operations is \$100,000 while its investment requirement is \$500,000

Given:

$P_0 = \$5.00$, $k_e = 10\%$, $D_1 = \$0.50$, $X = \$100,000$ and $I = \$500,000$

The current total shareholder wealth is...

$$1000000 \times 5.00 = \$5,000,000$$

MM and the Dividend Irrelevance Theory

Recall that...

- ❖ $P_0 = (D_1 + P_1)/(1 + k_e)$

Case 1: If the dividend *is* paid, we have...

- ❖ So, $P_1 = P_0(1 + k_e) - D_1$

- ❖ $P_1 = 5.00(1.10) - 0.50 = \5.00

Case 2: If the dividend *is not* paid, we have...

- ❖ $D_1 = 0$

- ❖ $P_1 = P_0(1 + k_e)$

- ❖ $P_1 = 5.00(1.10) = \$5.50$

MM and the Dividend Irrelevance Theory

Case 1: If the dividend is paid the firm will need to issue new shares in the amount of...

$$mP_1 = nD_1 + I - X$$
$$m(5.00) = 1,000,000(0.50) + 500,000 - 100,000$$

$$\text{So, } m = \frac{900,000}{5.00} = 180,000 \text{ shares}$$

Case 2: If the dividend is not paid the firm will need to issue new shares in the amount of...

$$\frac{(\text{Investment} - \text{Cash from Operations})}{5.50} = 72,727 \text{ shares}$$

MM and the Dividend Irrelevance Theory

What happens to shareholder wealth in each case?

Case 1: If the dividend is paid...

$$\begin{aligned}\text{Shareholder wealth} &= [(1,180,000) (5.00) + 100,000 - 500,000] / 1.10 \\ &= \$5,000,000\end{aligned}$$

Case 2: If the dividend is not paid...

$$\begin{aligned}\text{Shareholder wealth} &= [(1,072,727) (5.50) + 100,000 - 500,000] / 1.10 \\ &= \$5,000,000\end{aligned}$$

The decision to pay or not pay a dividend does not affect firm value and dividend policy is irrelevant under these assumptions

Is dividend policy really irrelevant in the “real world”?

Dividends and Taxes

The **differential tax treatment** of dividend income versus capital gains (arising from retained earnings) can result in shareholders preferring the **payment of dividends, or not**

We examine this difference in the tax treatment of dividends by comparing a **firm's dividend policy under...**

A **classical** tax system

An **imputation** tax system

Dividend Policy in a Classical Tax System

Under the classical tax system...

From a dollar of corporate earnings, the shareholder ends up with

$(1 - \tau_C)(1 - \tau_P)$ dollars of after-personal-tax dividend

That is, dividends are **effectively taxed twice**

Capital gains are **taxed at a lower rate** and the **effective tax rate** on capital gains may even approach zero if share sale are **postponed well into the future**

Does it make sense for firms to ever pay dividends under the classical tax system?

Dividend Policy in a Classical Tax System

A classical tax system will tend to lead to the creation of different shareholder “clienteles” depending on their tax rates

Shareholders who pay higher tax on dividends than on capital gains would choose a low dividend paying firm

Shareholders who pay lower tax on dividends than on capital gains would choose a high dividend paying firm

What should the firm do?

Bottom line?

Dividend policy may still be irrelevant via the shareholder clientele effect

Low Payout Please

Why might a low payout be desirable?

Individuals in upper income tax brackets might prefer lower dividend payouts, with the immediate tax consequences, in favor of higher capital gains

Dividend restrictions: debt contracts might limit the percentage of income that can be paid out as dividends

High Payout Please

Why might a high payout be desirable?

Desire for current income

Individuals in low tax brackets

Groups that are prohibited from spending principal (trusts and endowments)

Uncertainty resolution: no guarantee that the higher future dividends will materialize

Taxes

Tax-exempt investors don't have to worry about differential treatment between **dividends and capital gains**

Imputation and Dividend Policy

Under the imputation tax system...

Earnings distributed as **franked dividends to resident shareholders** is effectively **taxed once** at the shareholder's (marginal) personal tax rate

If all a firm's shares were held by resident shareholders with marginal tax rates *less than the corporate tax rate*, then the optimal dividend policy would be to pay dividends and **exhaust the available franking credits**

However...

Many individuals have personal marginal tax rates **that are higher** than the corporate tax rate who may prefer the retention of earnings

Not all shareholders **are resident shareholders**

Imputation and Dividend Policy

Bottom line?

The interaction of **capital gains tax** and the **imputation tax system** means that shareholders with low marginal tax rates **would** prefer earnings to be paid out as dividends

Those in **high marginal tax rates** may tend to prefer earnings to be retained
“**Imputation clienteles**” may exist at the firm level

Does Dividend Policy Matter?

Probably not a resounding “yes”, but a qualified “yes”...

Markets are not perfect and market imperfections drive managers to pay attention to do “what the market wants”

Taxes are the obvious market imperfection but in some cases the irrelevance of dividend policy may still hold

The classical tax system versus the imputation tax system

Dividends do contain information and possess strong “signaling” elements as well

Dividends also result in lowering the agency costs between management and shareholders

Clientele Effect

Some investors prefer **low dividend payouts** and will buy stock in those companies that offer **low dividend payouts**

Some investors prefer **high dividend payouts** and will buy stock in those companies that offer **high dividend payouts**

Implications

What do you think will happen if a firm changes its policy **from a high payout to a low payout?**

What do you think will happen if a firm changes its policy **from a low payout to a high payout?**

If this is the case, **does dividend POLICY matter?**

Information Content of Dividends

Stock prices generally rise with **unexpected** increases in dividends and fall with **unexpected** decreases in dividends

The stock market reacts **positively** to dividend increases and **negatively** to decreases or cuts.

Empirical evidence shows that tax increases lead to **higher payouts**, rather than lower.

Dividend Policy in Practice

Residual dividend policy

Constant growth dividend policy – dividends increased at a constant rate each year

Constant payout ratio: pay a constant percent of earnings each year

Compromise dividend policy

Residual Dividend Policy

Determine **capital budget**

Determine **target capital structure**

Finance investments with a combination of **debt and equity** in line with the target capital structure

Remember that **retained earnings are equity**

If additional equity is needed, **issue new shares**

If there are excess earnings, then **pay the remainder out in dividends**

Example – Residual Dividend Policy

Given

Need \$5 million for new investments

Target capital structure: $D/E = 2/3$

Net Income = \$4 million

Finding dividend

40% financed with debt (2 million)

60% financed with equity (3 million)

Net Income – equity financing = **\$1 million, paid out as dividends**

Compromise Dividend Policy

Goals, ranked in order of importance

Avoid cutting back on positive NPV projects to pay a dividend

Avoid dividend cuts

Avoid the need to sell equity

Maintain a target debt/equity ratio

Maintain a target dividend payout ratio

Companies want to accept positive NPV projects, while avoiding negative signals

Stock Repurchase

Company buys back its own shares of stock

Tender offer: company states a purchase price and a desired number of shares

Open market: buys stock in the open market

Similar to a cash dividend in that it returns cash from the firm to the stockholders

This is another argument for **dividend policy irrelevance** in the absence of taxes or other imperfections

Real-World Considerations

Stock repurchase allows investors **to decide** if they want the current cash flow and associated tax consequences

Investors face capital gains taxes **instead** of ordinary income taxes (lower rate)

In our current tax structure, repurchases may be more desirable due to the options provided stockholders

Information Content of Stock Repurchases

Stock repurchases sends a positive signal that management believes that the current price is low

Tender offers send a more positive signal than open market repurchases because the company is stating a specific price

The stock price often increases when repurchases are announced

Stock Repurchase Announcement

“America West Airlines announced that its Board of Directors has authorized the purchase of up to **2.5 million shares** of its Class B common stock on the open market as circumstances warrant **over the next two years ...**

“Following the approval of the stock repurchase program by the company’s Board of Directors earlier today. W. A. Franke, chairman and chief officer said ‘The stock repurchase program reflects our belief that America West stock may be an attractive investment opportunity for the Company, and it underscores our commitment to enhancing long-term shareholder value.’

“The shares will be repurchased with cash on hand, but only if and to the extent the Company holds unrestricted cash in excess of **\$200 million to ensure that an adequate level of cash and cash equivalents is maintained.**”

Stock Dividends

Pay additional shares of stock instead of cash

Increases the number of outstanding shares

Small stock dividend

Less than 20 to 25%

If you own 100 shares and the company declared a 10% stock dividend, you would receive an additional 10 shares

Large stock dividend: more than 20 to 25%

Stock Splits

Stock splits: essentially the same as a stock dividend except expressed as a ratio

For example, a 2 for 1 stock split is the same as a 100% stock dividend

It is often claimed that stock splits, in and of themselves, **lead to higher stock prices**; research, however, does not bear this out. What is true is that **stock splits are usually initiated after a large run up in share price**

Common explanation for split is to return price to a **“more desirable trading range”**

Key Concepts

Dividend policy is about the trade-off between retaining profit and paying out dividends

Dividend policy does not affect shareholders' wealth in a perfect capital market

Dividend policy becomes important when we consider taxes and other market imperfections

The imputation tax system does eliminate double taxing of dividend income and encourages higher dividend payout ratios