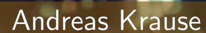

Dividend policy

- We will now look at the importance of dividend policy for the value of companies.
- Dividends are used to value companies, so a lower dividend payment should reduce the value of the company.
- However, we will see that in ideal conditions dividends are irrelevant for the value of the company and they can be used to reduce moral hazard as well as asymmetric information and high dividends can through this mechanism increase the value of companies.

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Dividends and earnings

- Companies pay a fraction of their earnings as dividends to its owners
- The remainder is kept by the company (retained earnings) and increases its equity
- Retained earnings can be used to finance further investments
- Dividends are a source of income for equity owners

Dividends and earnings

- → In many valuation models, dividends and earnings are used interchangeably, we will briefly outline the important difference between these.
- Companies normally pay some of their earnings for the quarter or year as dividends to their shareholders. Some companies pay a larger fraction of their earning as dividends, while other companies pay no dividends at all, even though they are profitable.
-
  - Those earning not paid out as dividends are kept in the company,
  - this is referred to a retained earnings.
  - Those earnings that are retained are increasing the equity of the company.
- Increasing equity will increase the funds available for future investments, which can increase the value of a company.
- On the other hand, dividends are a source of income for investors, which they might value.
- → Dividends are therefore not the same as earnings, but might be a paid from earnings.

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Balancing income and investment

- Companies need to balance providing an income to owners with making additional investments
- Additional investments would lead to higher profits in the future and higher future dividends
- As future investments are dependent on retained earnings, we will see how dividends can be used to signal information to the market

Balancing income and investment

→ Paying dividends is a balancing of two needs investors and companies have.

- Companies need to provide an income to investors, as this what generates the value of investing into a company, but on the other hand it also needs to retain earnings to finance investments that allow the company to generate earnings.
-
  - Making additional investments would increase future profits
  - and these would asllow to pay higher dividends in the future. Thus not paying dividends might be seen as postponing their payment to a future date,w here larger dividends are paid.
- The size of future investments will depend on the size of the retained earnings, and we will investigate how dividends can be used by managers to signal to investors their information about the prospects of the company.

→ We have thus alluded to the fact that dividends are not only used to create value, but might also be used to convey information.

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Increasing equity and retained earnings

- Retained earnings are not the only source to increase investments, companies can also raise additional equity
- We will see how companies would optimally balance dividends and raising additional equity in the market
- Companies might also retain too much earnings such that not all can be invested and we will look at the impact this has on company values

Increasing equity and retained earnings

→ We will now look at a situation where dividend payments reduced the size of possible future investments and what consequences this will have on company value.

- While retained earnings allow companies to invest more, they can also raise additional equity from existing or new shareholders. We exclude the possibility here of raising debt to finance investments as that touches on the area of capital structure.
- We will investigate how companies can balance these two aspects of dividends, providing income to investors and making future investments.
-
  - We will also look at a situation where companies retain so much earnings that not all of it can be invested productively.
  - We will see how in such a case dividends can be used to reduce moral hazard of managers making value-destroying investments.

→ We will now look at the reason why dividends might be irrelevant, but on the other hand might be relevant to reduce moral hazard.

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Dividend irrelevance and moral hazard

→ The result of dividend irrelevance is one of the fundamental results in corporate finance and used as a justification to conduct stock valuation using earnings rather than dividends.

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Dividends do not matter without moral hazard

- We have seen that the dividends paid are irrelevant for the value of the company as long as future investments are profitable
- If investments are not profitable or retained earnings can be diverted to benefit managers, dividends should be increased

? Even if managers cannot divert earnings for their own benefit, when would shareholders prefer high dividends?

! If the company has only low-value investments available and shareholders have better investments available to them, they would prefer a return of funds to make such investments

Dividends do not matter without moral hazard

→ We have seen that in perfect market conditions, dividends are irrelevant, but they can also be used to reduce moral hazard.

-
  - We have seen that dividends do not matter for the value of companies as the finds lost for investment can be replaced by raising new equity.
  - This is only the case if the company has access to sufficiently profitable investments.
- If profitable investment opportunities are not available, managers might divert any excess funds for their own benefits and increasing dividends would reduce this moral hazard.
- Assume that managers are not able to divert any excess cash to make investments for their own private benefit, would it still be beneficial to pay high dividends?
- It could be that investor have access to other investments that give them a higher return, for example they may increase the equity of another company with better investments. This would benefit investors and they would prefer receiving a high dividend in this case.

→ Dividends do not matter is the company can raise equity freely and there is no moral hazard in that managers might make unprofitable investments.

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Asymmetric information between shareholders and managers

- Companies have better information about future prospects than outside investors
- If dividends affect their ability to make investments, they might use dividends strategically to maximize company value
- Investors can observe dividend decisions and might be able to infer from that the prospects of the company

Asymmetric information between shareholders and managers

- → We can now also look at the way companies can use dividends to provide information to investors about their prospects.
- ▶ Investors often struggle to assess the prospects of companies as they do not have the same skills and information as the managers of a company. Managers have a distinct advantage in that they have access to more detailed information, which they would not reveal to their investors as this information might also be of use to their competitors.
- ▶ We propose that managers might use dividends as a signal to convey the information they otherwise cannot credibly provide (any information needs to be verified or it would be what in economics is referred to as 'cheap talk', where anything can be said). They can do so credibly as paying dividends affects their ability to make future investments to the size of retained earnings and thus paying dividends imposes a cost on the company.
- ▶ Investors observing the dividend payment, or the announcement, will be able to make inferences about the information the company has.
- → Only the type of information is provided credibly, not the information itself in this case. It is thus that by conveying this information, competitors are unlikely to benefit as no actual information is revealed.

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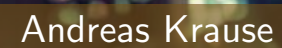

Signalling with dividends

→ We can now see how managers can reduce asymmetric information through their dividend announcements.

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Dividends revealing company prospects

- Dividends can signal the prospects of a company as the impact of high dividends is more severe if these prospects are less good
- The information obtained from the dividend decision will then affect the company value as its type is revealed

? A company pays a high dividend, does it then always follow that it has good prospects?

! It can signal good prospects, but might also be the result of reducing moral hazard if the company does not have many good investment projects

Dividends revealing company prospects

→ We have seen that dividends can be selected such that they are able to convey information about the prospects of the company.

- High dividends have a lesser impact on companies' ability to conduct investments if they are highly profitable; this is because the high profits allow nevertheless to make significant investments that a company with lower profits would not be able to sustain. Thus paying high dividends imposes costs on companies with low profits, making this strategy not sustainable.
- With investors inferring the prospects of the company, this will affect the company value, a high dividend will be seen as a sign of high future profits and hence the value of the company will increase.
- If you have a company that pays high dividends, is it that its future profitability will always be high, assuming the management assess the company prospects correctly?
- Based on the previous model, high dividends can signal good prospects, but looking at the model earlier, it may also signal a reduction of moral hazard if the company has no good investment opportunities, in this case it is a sign of bad prospects.

→ We have seen that dividends can be used as a signal by management for the prospects of the company that cannot be conveyed credibly by other means. However, moral hazard reduction might lead to similar dividend decisions, making it not clear what the motivation of the company is.

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Summary

- Dividends can serve as a signal about the prospect of a company
- Dividends can also be used to reduce moral hazard, but this implies no good investment opportunities or managers taking advantage of their decision-making power
- Without these effects, dividends are not relevant for company value as the earnings paid out can be recovered through raising additional equity

Summary

→ We can now summarize the key results we have obtained about dividend policies.

- We have seen that high dividends can signal that the management of the company assess its prospects to be good.
-
  - However, there might be other reasons high dividends are paid, it could be to reduce moral hazard,
  - suggesting the company has no good investment opportunities and pays a high dividend to return excess funds to shareholders if they can make better use of these monies.
  - They might also pay a high dividend to deprive managers of the opportunity to use excess funds in the company to their own benefit.
- These effects, even if their implications are not always clear affect the value of the company. We have, however, seen that in perfect markets without moral hazard and without asymmetric information, dividends are irrelevant as companies can recover the paid out funds by raising new equity.

→ Dividend policy can be used to increase the value of the company. Paying a high dividend can signal good prospects, but also bad prospects if it is used to reduce moral hazard or return funds to investors. In the latter case a higher dividend might reduce the value of the company if the poor prospects were not previously known. Thus, dividend policies can be difficult to assess, unless the motivation of companies can be conveyed to investors.

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