Andreas Krause

Dividend irrelevance and moral hazard

- Dividends are paid out of the earning of a company and form an important source of income to some investors; they are also used as the cash-flow to investors that determine the value of shares.
- We will see here that on the one hand it does not affect the value of shares if dividends are paid out or retained, but that, on the other hand, it might change the incentives of the managers of a company of dividends are paid out.

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Dividends and equity increases

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→ We will briefly have a look at the impact the payment of dividends has on the equity of a company.

- - Dividends are paid to shareholders of the company, or in general the owners of the company.
  - Making these payments reduces the equity of the company; this is because dividends are paid from the profits of the company and these profits belong to the equity holders. Therefore profits increase the equity of a company and dividends are paid out from this.
- Having less equity could mean that the company has less funds available and hence can make less investments. Therefore, dividend payments may reduce the investments a company can make.
- On the other hand, companies can raise additional equity to compensate for the reduced equity from dividend payments.
- - When using the discounted cash-flow model to value companies, it was the present value of future dividends that determined the stock value.
  - Reducing dividends to increase investments would then reduce the stock value.

→ Hence, despite maintaining the investments at the same level, reducing the dividend should according to this valuation formula reduce value of the stock.

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Replacing dividends with equity increases

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  - and the price that can be obtained in the future.
- *Formula*
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  - The investments a company can make are those they can make with funds they have available after paying the dividend
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  - We see that the dividends are not part of the value of the stock, it is only the level of investment compared to the share issue that is relevant.
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→ If new shares are issued to recover paid out dividends, the value of the company is not affected.

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- The current price should reflect the present value of the future dividend
- $P_t = \frac{d_{t+1}}{1+\mu}$

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Pay out and take back

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- → We can now look at the logic behind the result that dividends do not affect the company value.
- ▶ Companies can pay dividends and then raise new funds by issuing new shares to reduce the lost equity.
- ▶ There is no overall effect on the value of the company. This is because the future prospects of the company are not affected, they make the same investments, regardless of the dividends they pay. The dividend payment is replaced by the same or different shareholders and hence there is no net change in the position of shareholders.
- ▶ This result is one of the cornerstones of corporate finance and known as the Miller and Modigliani dividend irrelevance,
- ▶ An implicit assumption here is that the company has investment available in the future that are adding the same value to the company as those they had in the past. If the profits these future investments generate change, the value of the company will change. This change is independent of the dividend payment, however.
- → Hence as long as companies can replace the equity they lose due to dividend payments with new share issues, the company value is unaffected by the amount of dividends a company pays.

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- → Hence as long as companies can replace the equity they lose due to dividend payments with new share issues, the company value is unaffected by the amount of dividends a company pays.

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Excess cash holdings

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