



Andreas Krause

Dividend irrelevance and moral hazard

# Dividends and equity increases

- ▶ Dividends represent the payments made to shareholders of a company and reduce the equity the company holds
- ▶ This reduction in equity could lead to a reduction in investments the company can make
- ▶ Companies can raise equity to increase the investments they can make
- ▶ Dividends enter the formula valuing the company and reducing them should reduce the company value

## Replacing dividends with equity increases

- ▶ The current price should reflect the present value of the future dividend and the price that can be obtained
- ▶  $P_t = \frac{d_{t+1} + P_{t+1}}{1 + \mu}$
- ▶ A company makes investments which are financed by retained earnings and the issue of new shares
- ▶  $I_{t+1} = (E_t - d_{t+1}) + S_{t+1}$
- ⇒  $d_{t+1} = E_t + S_{t+1} - I_{t+1}$
- ⇒  $P_t = \frac{E_t + S_{t+1} - I_{t+1} + P_{t+1}}{1 + \mu}$
- ▶ Dividends are not part of the value of the company and hence dividends are irrelevant

# Pay out and take back

- ▶ Dividend payments can be made at any level and the funds paid out recovered through issuing shares
- ▶ The overall value of the company is not affected
- ▶ This result is known as Miller and Modigliani's dividend irrelevance
- ▶ Implicitly it assumes that companies can continue with investments that add the same value in the future as they have in the past

# Excess cash holdings

- ▶ Companies generating earnings usually accumulate cash
  - ▶ This cash can be used to make investments or pay dividends
  - ▶ If not sufficient good investments are available, managers might use the excess cash on vanity projects or excessive benefits
  - ▶ This moral hazard would reduce the value of the company
- ⇒ Paying dividends can reduce moral hazard and increase company value



Copyright © by Andreas Krause

Picture credits:

Cover: Premier regard, Public domain, via Wikimedia Commons, [https://commons.wikimedia.org/wiki/File:DALL-E\\_-\\_Financial\\_markets\\_\(1\).jpg](https://commons.wikimedia.org/wiki/File:DALL-E_-_Financial_markets_(1).jpg)

Back: Rhododendrites, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons, [https://upload.wikimedia.org/wikipedia/commons/0/04/Manhattan\\_at\\_night\\_south\\_of\\_Rockefeller\\_Center\\_panorama\\_\(11263p\).jpg](https://upload.wikimedia.org/wikipedia/commons/0/04/Manhattan_at_night_south_of_Rockefeller_Center_panorama_(11263p).jpg)

Andreas Krause  
Department of Economics  
University of Bath  
Claverton Down  
Bath BA2 7AY  
United Kingdom

E-mail: [mnsak@bath.ac.uk](mailto:mnsak@bath.ac.uk)