CORPORATE FINANCE FOR LONG-TERM VALUE

Chapter 16: Issues and payouts – changes in capital structure

Part 5: Corporate financial policies

Chapter 16: Issues and payouts – changes in capital structure

The BIG Picture

- Issues raise cash from providers of capital and payouts pay cash to providers of capital

Discussion

- Issues and payouts are only value relevant in imperfect markets
- Financial payout ratio is payout (dividends + share buybacks) as percentage of profit
- Impact of E and S on financial issues and payouts is most obvious through their impact on risk, debt capacity and cash flows
- Integrated payout ratio calculates payout as percentage of integrated value flows
- Caution on payouts in the presence of significant liabilities on E or S

Issues of financial capital

- When companies need extra capital, they might issue additional capital:
  - Bonds – debt
  - Shares – equity
- The *initial public offering* (IPO) is a company's first equity issue in public equity markets
- Subsequent equity issues are called *seasoned equity offerings* (SEOs)
- A *rights issue* invites existing shareholders to purchase additional new shares in the company

Issues in perfect capital markets

- If a company with 5 million shares raises 10 million in equity:
  - Assets and cash increase by 10 million
  - The stock price remains the same
    - 20 / 5 = 4 value per share before issue
    - 30 / 4 = 7.5 million outstanding shares after issue (so 2.5 million shares issued)
  - Leverage (debt / equity) decreases
    - From 0.20 (= 5 / 25) to 0.14 (= 5 / 35)
      - Company reduces risk

Market value balance sheet – before equity issue

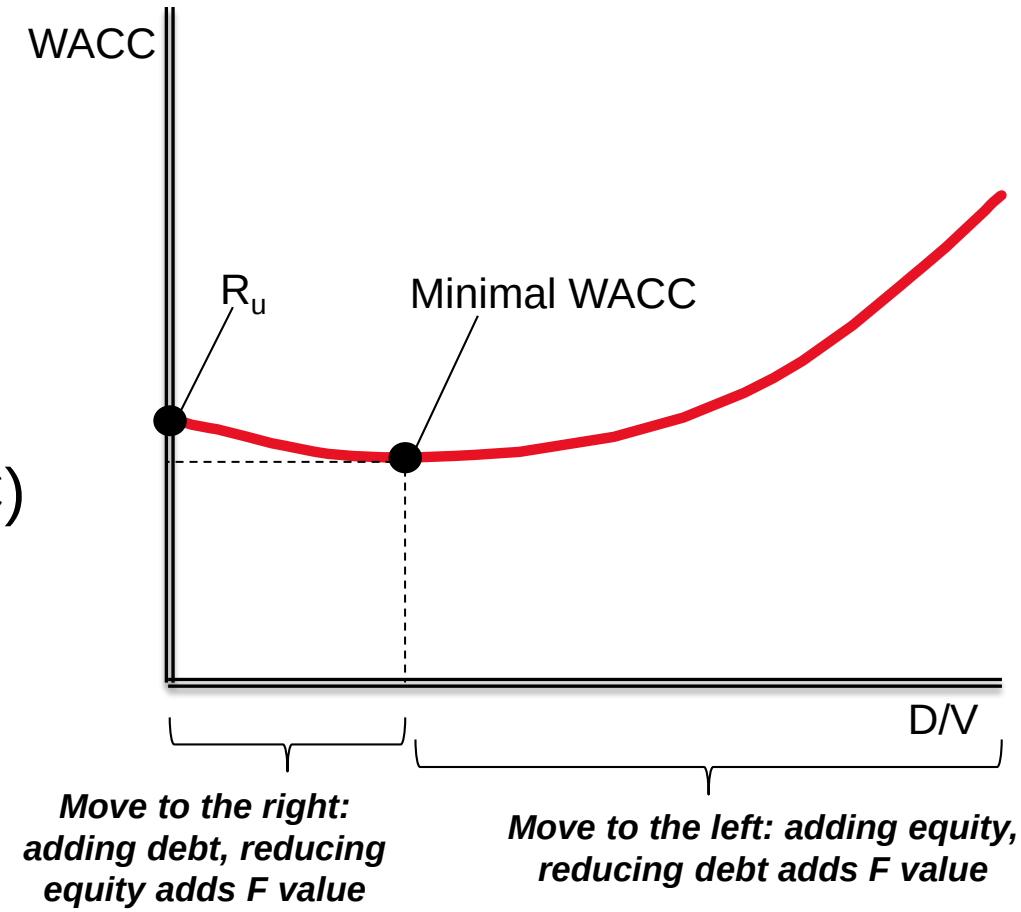
F assets	25	F debt	5
		F equity	20
Total assets	**25**	**Total liabilities**	**25**

Market value balance sheet – after equity issue

F assets	35	F debt	5
		F equity	30
Total assets	**35**	**Total liabilities**	**35**

Cost of issues due to market imperfections

- Due to the tax deductibility of interest, adding debt might increase FV until bankruptcy costs outweigh tax benefits
- Optimal capital structure is where the *weighted average cost of capital* (WACC) is lowest



Cost of issues due to market imperfections

- Assume that information asymmetries result in a -3% stock price reaction at announcement of the issue:
  - Equity (and assets) decreases by 0.6 (= 3% x 20)
  - Share price drops to 3.88 (= 19.4 / 5)
- To raise 10 million in equity:
  - The company will need to issue more shares:

    10 / 3.88 = 2.577 million shares

Market value balance sheet – **before announcement**

F assets	25	F debt	5
		F equity	20
Total assets	**25**	**Total liabilities**	**25**

Market value balance sheet – **after announcement**

-0.6

F assets	24.4	F debt	5	
		F equity	19.4	**-0.6**
Total assets	**24.4**	**Total liabilities**	**24.4**	

Market value balance sheet – **after equity issue**

F assets	34.4	F debt	5
		F equity	29.4
Total assets	**34.4**	**Total liabilities**	**34.4**

Why do companies issue capital?

- Two main reasons why companies issue equity or debt despite the costs:
  1. In need of cash for investments with NPV > negative **APV** (adjusted present value) of issue
  2. Owners of privately-owned company may want to (partially) exit

APV includes funding costs of transaction

- Additional long-term factors for issuing equity:
  - **Reduce leverage**
  - Improve liquidity of shares
  - Enhance company image and publicity
  - Motivate employees and management
  - Explore mispricing
- Disadvantages for issuing equity
  - **High cost of issues**
  - Loss of control and ownership

Internal errors in issuing capital

- The *adjusted present value* (APV) method judges the attractiveness of an issue
- Internal errors: managers overestimate cash flows and/or underestimate risk

APV components	20% overvalued by management	10% undervalued by management
plus: cash in	300	300
minus: management's valuation of the shares	-360	-270
minus: transaction costs	-15	-15
sum: management's perceived APV	**-75**	**15**

- If APV is negative: management feels it is giving away value
- Positive APV is unlikely
- This APV calculation doesn’t take into consideration positive NPVs for future investments

External errors in issuing capital

- External errors: market under- or overvalues (groups of) companies or market indices

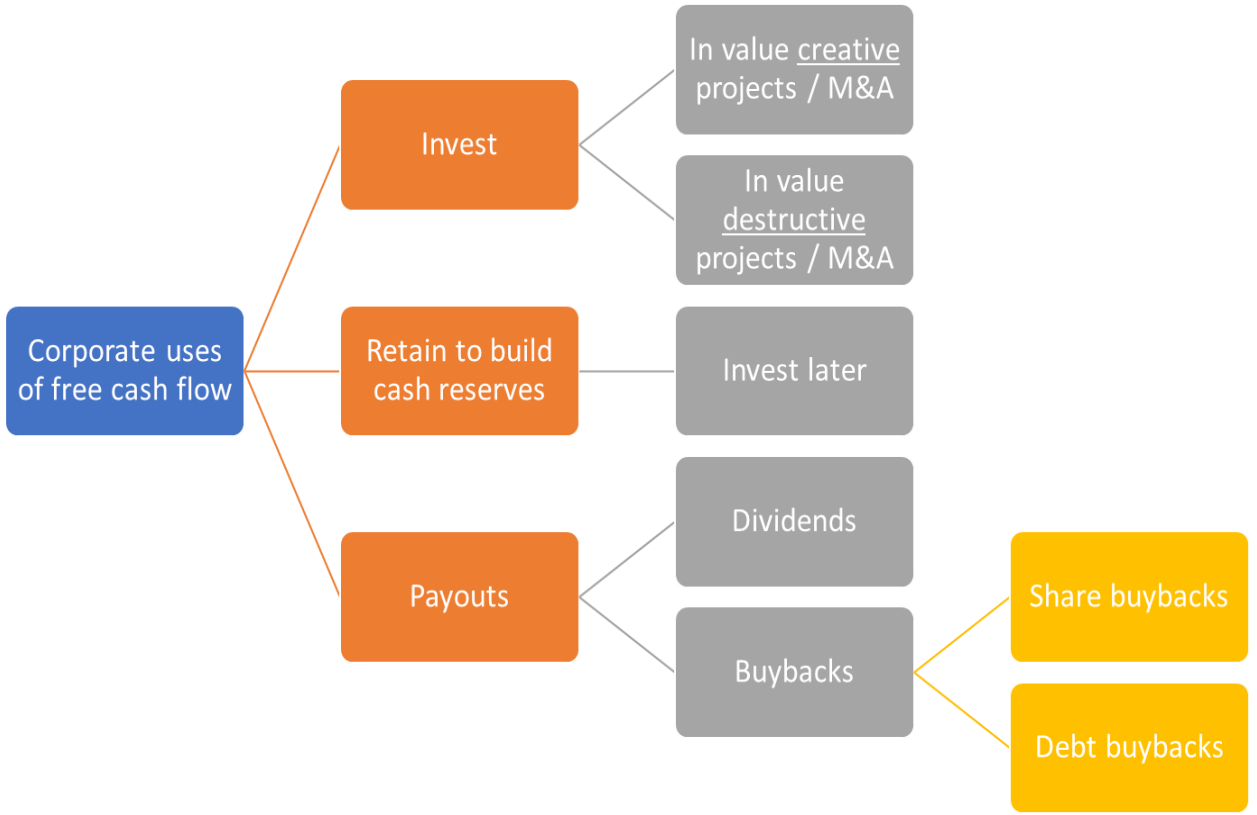
APV components	20% overvalued by the market	25% undervalued by the market
plus: cash in	300	300
minus: management's valuation of the shares	-250	-400
minus: transaction costs	-15	-15
sum: management's perceived APV	**35**	**-115**

- Corporate executives “time the market”
  - Examples: ‘tronics boom in the early 1960s & internet IPOs in the late 1990s

Payouts to financial capital

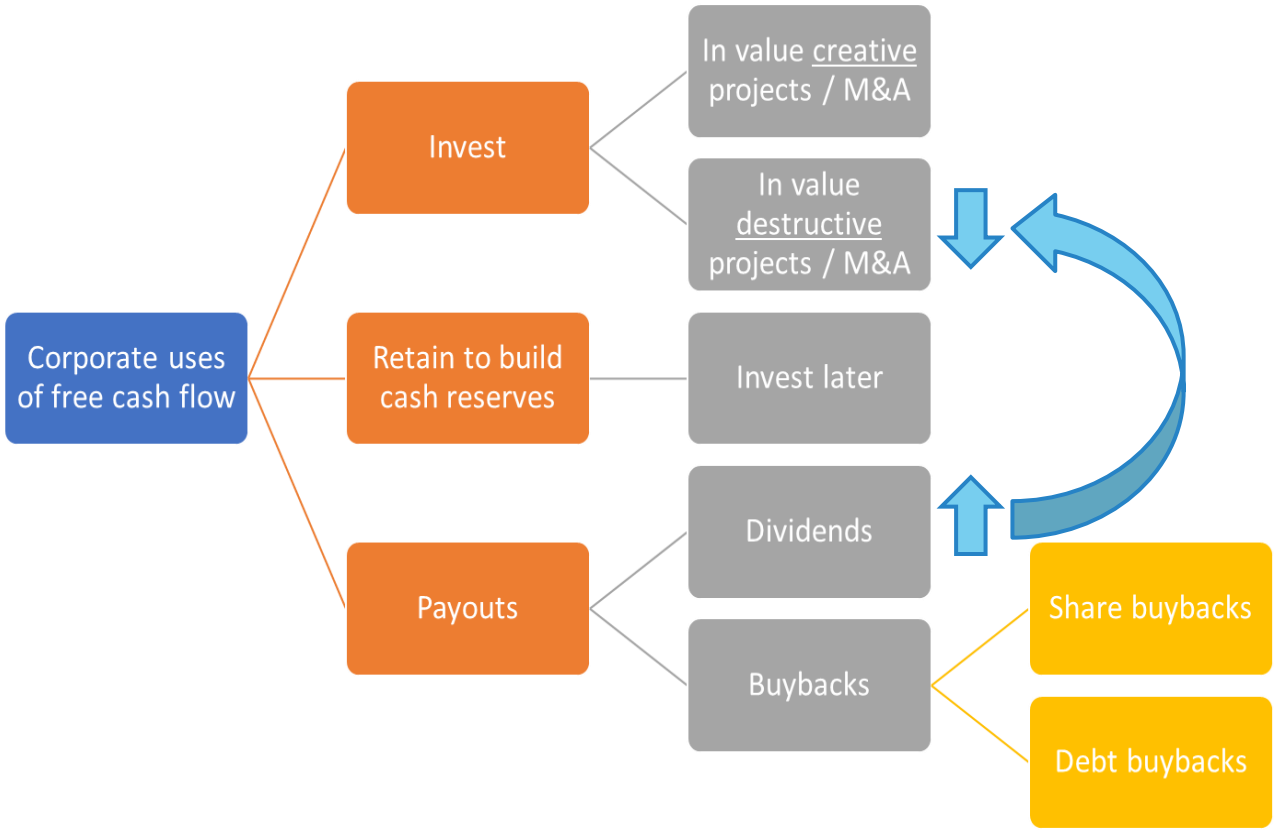
- In payouts, companies return capital to the financiers
- Payouts on equity: dividends & share repurchases / buybacks
- For investors, payouts are a way to get income from invested funds

$$Payout\ ratio = \frac{Payouts}{Net\ income}$$



Payouts to financial capital

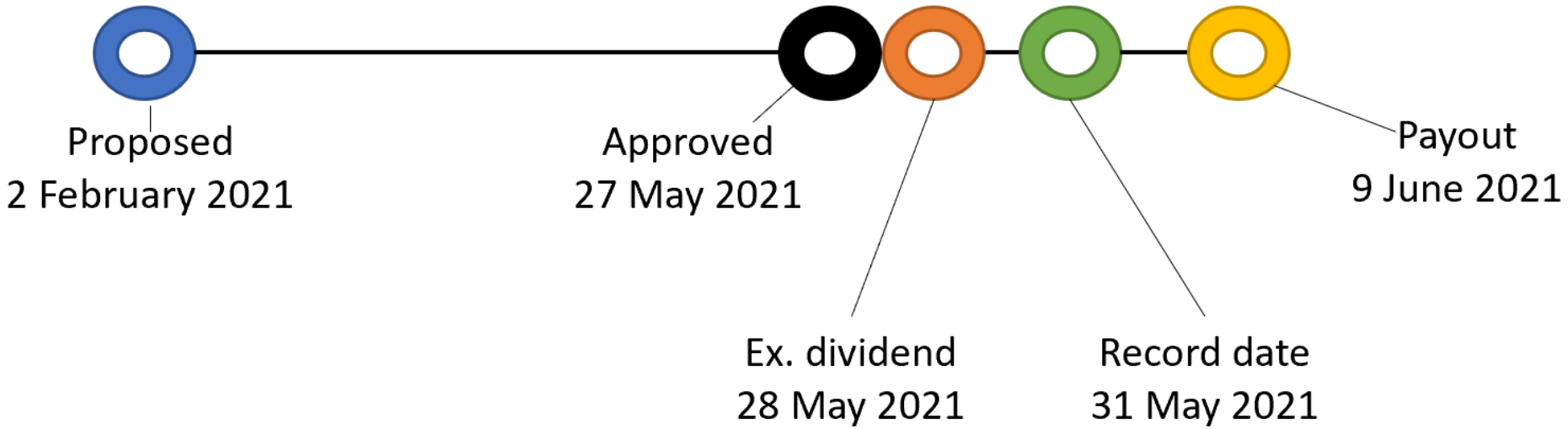
- In perfect capital markets, dividend payment = stock price drop
- Free Cash Flow (FCF) Theory: managers tend to waste FCF on negative NPV projects and overconsumption of perks (i.e., corporate jets)
  - Higher dividends reduce investment in value destructive projects



Dividends

- **Signaling theory**: high and rising dividends signal high company quality
- Lintner (1956) found that companies establish long-run target payout ratios
- Managers prefer to smooth dividends
  - Reserve earnings from good financial years to pay dividends in bad years
  - Leads to negative perception of dividends cuts, with negative stock price reaction
- Cash dividends are cash payments to shareholders
- Repurchases / buybacks: company buys shares from its shareholders

Example: timeline Telenor 2020 dividend



Calculating dividends

- Company has:
  - 3 million shares outstanding, with a per share value of 237 (711 million / 3 million)
  - Dividend policy of 50% payout ratio
  - Most recent FY: profit of 66 million, so 33 million in dividends and 11 per share (= 33 million / 3 million)
  - Dividend yield of 4.6% (= 11 / 237)

F investment projects	760	F debt	112
F cash	63	F equity	711
Total assets	**823**	**Total liabilities**	**823**

Number of shares outstanding, millions	**3**
Value per share	237
Net profits, millions	66
Payout ratio	50%
Total dividend paid, millions	33
Dividend per share	11
Dividend yield	4.6%

Stock dividend and stock splits

- Paying dividends with shares → not really payout
- Increase in shares outstanding is corrected by falling share price
- Stock splits lead to dramatic changes in shares outstanding
  - Undertaken for shares with high price per share

	Value before the 15:1 stock split	Value after the 15:1 stock split
Stock market value, € billions	26	26
Number of shares, millions	80	1200
Value per share, €	325	21.67

Share repurchases & taxes

- Two ways to do share repurchases (also known as share buybacks):
  - Open market operations – a company buys back shares in the market
  - Tender offers – shareholders receive an offer that asks to submit (tender) a portion of their shares
- Dividends are more heavily taxed than capital gains and repurchases
- Tax rates differ across shareholders, with some (such as pension funds) being tax-exempt
- **Dividend capture theory**: in absence of transaction costs, investors can trade shares so that non-taxed investors receive dividends

Behavioural view on payouts

- Internal errors: managers may be tempted to pay too-high dividends or do too-big share repurchases due to overestimated earnings and underestimated risk
- A strong rationale for paying dividends lies in catering to investor needs:
  - Self-control: dividends make people less reliant on self-control with trading shares
  - Mental accounting: segregating overall gain/loss into several components
  - Regret avoidance: people feel more regret over selling too early (cheaply) than not reinvesting in the same stock

E and S issues and payouts of financial capital

- E and S affect factors (such as risk, debt capacity and cash flows) that influence whether companies will do payouts or new issues

- The sudden internalisation of costs could lead to issues and payouts
  - Example: Bayer made dividend cuts in 2021 after litigation on E issues (Monsanto)

- Internalisation over time
  - Rising carbon tax → invest in new technologies → reduce FCF → lower dividends

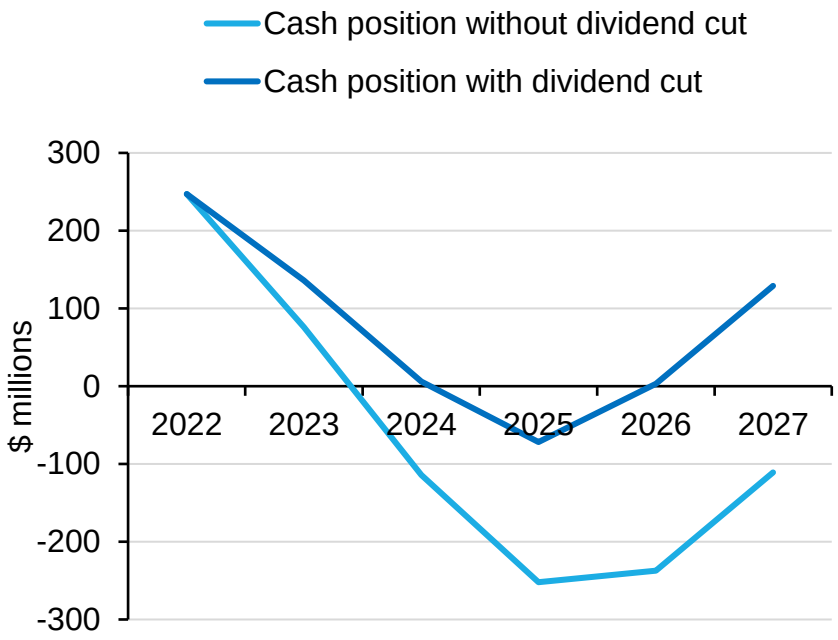
Example of E and S effect on dividend policy

- Option 1: continue to pay dividends

	2022	2023	2024	2025	2026	2027
Net profit	140	-45	-58	-33	76	187
Depreciation	20	20	22	22	22	22
Capex	-25	-86	-94	-67	-23	-23
FCF	135	-111	-130	-78	75	186
Dividend (fixed)	**60**	**60**	**60**	**60**	**60**	**60**
Payout ratio	43%	-133%	-103%	-182%	79%	32%
Cash position without dividend cut	**247**	**76**	**-114**	**-252**	**-237**	**-111**

- Option 2: cut dividends until cash and FCF turns

	2022	2023	2024	2025	2026	2027
Net profit	140	-45	-58	-33	76	187
Depreciation	20	20	22	22	22	22
Capex	-25	-86	-94	-67	-23	-23
FCF	135	-111	-130	-78	75	186
Dividend (fixed)	**60**	**0**	**0**	**0**	**0**	**60**
Payout ratio	43%	0%	0%	0%	0%	32%
Cash position with dividend cut	**247**	**136**	**6**	**-72**	**3**	**129**

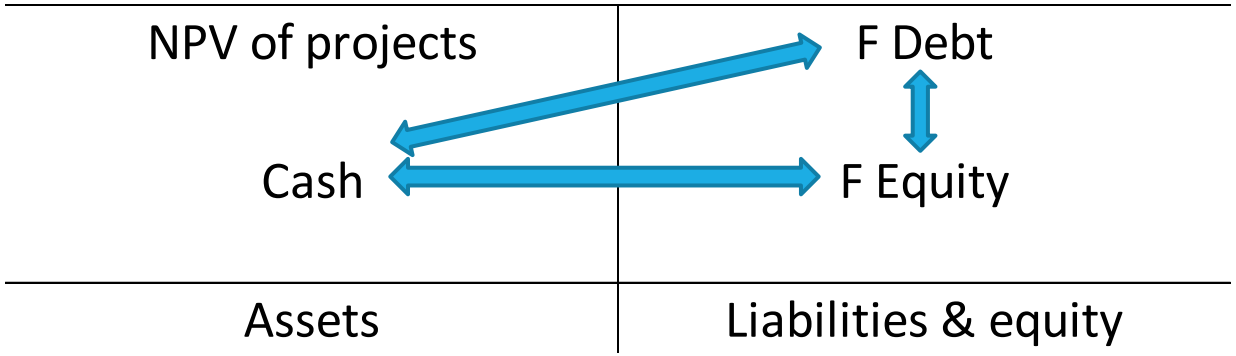


E and S issues and payouts of financial capital

- Value destruction on E and S puts future cash flows at risk
  - This should make payouts less likely for ethical managers
- However, a short-term minded manager will likely opt for payouts to “milk the cash”
- A positive contribution to E and S creates value, which strengthens capital structure
- Example: Novozymes – a Danish bioenergy provider
  - Expected positive E flows
  - Positive effect on financial position (due to increased demand for low carbon fuels)
  - Could lead to increased dividend payouts in the future

Issues and payouts for social (S) and natural (E) capital

- The value of assets, equity and liabilities on E and S change over time
- Unclear whether changes take the form of payouts or issues
- Difference between F and S and/or E: cash on F balance sheet



Integrated view on payouts

$$Payout\ ratio = \frac{Payouts}{Net\ income} \rightarrow Integrated\ payout\ ratio = \frac{Payouts}{Net\ integrated\ income}$$

- Net integrated income is derived from the integrated profit & loss account (IP&L)

	Positive	Negative	Net	Payouts	
E value flows	1	-12	-11		
S value flows	9	-2	7		
F value flows	6	0	6		
Payout				4	
Financial payout ratio				67% (= 4 / 6)	**Financial perspective: payout is reasonable**
Net integrated flows	16	-14	2		
Payout				4	
Integrated payout ratio				200% (= 4 / 2)	**Integrated perspective: payout is excessive**

E and S issues and payouts of financial capital

- In case of high integrated payout ratio (>100%), cutting dividends could allow for more investment to fix negative E and S flows

- Ang and Lambooy (2022) propose an integrated payout test:
  - Let payout policy depend on social and natural capital, on top of financial capital
  - Test based on financial, social and environmental metrics

- Auditing rules already require companies to take provisions when they are aware of contingent social or environmental liabilities

Company cases

Inditex

	Flows in € billions
(1) Net profit	3.25
(2) Net positive social flows	4.10
(3) Net negative social flows	-2.88
(4) Net negative environmental flows	-3.73
(5) Net integrated flows (= sum 1 to 4)	0.74
(6) Dividend	2.19
(7) Financial payout ratio (= 6 / 1)	67%
(8) Integrated payout ratio (= 6 / 5)	296%

Novozymes

	Flows in € billions
(1) Net profit	0.40
(2) Net environmental flows	1.16
(3) Net integrated flows (= 1 + 2)	1.56
(4) Dividend	0.21
(5) Financial payout ratio (= 4 / 1)	53%
(6) Integrated payout ratio (= 4 / 3)	13%

Conclusions

- Issues raise cash from providers of capital and payouts pay cash to providers of capital
- Issues and payouts are only value relevant in imperfect markets
- The impact of E and S on financial issues and payouts is most obvious through their impact on risk, debt capacity and cash flows
- The integrated payout ratio calculates payouts as percentage of integrated value flows
- Caution on payouts in the presence of significant liabilities on E or S