Week 1

Overview of Corporate Finance

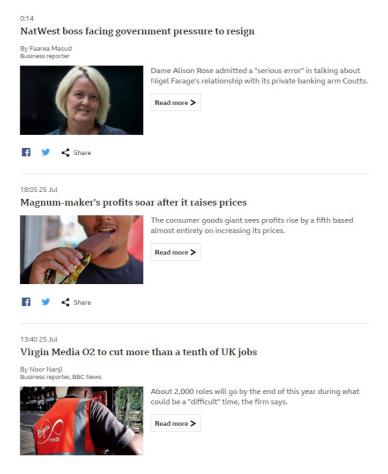
Lecture outline

- What is corporate finance?
- The goal of financial management
- Some concepts

Learning outcomes

- Understand what is corporate finance
- Understand the goal of financial managers and the role of financial managers

Corporate finance in the <u>news</u>



What is corporate finance?

Investment

- Choose the best projects
- Capital budgeting

Financing

- Choose sources of financing for investment
- Capital structure

Liquidity

- Ensure you
 have enough
 cash and
 inventory
- Short-term financial planning

A firm's balance sheet model

Net working capital

Current assets (e.g., cash, stock inventory)



Current liabilities (e.g., short-term debts)

Non-current assets:

- Tangible non-current assets (e.g., land, buildings, plants)
- Intangible non-current assets (e.g., trademarks, patents, copyrights)

Non-current liabilities (e.g., long-term debts)

Equity

Total assets (what the firm <u>owns</u>)

Total liabilities (what the firm <u>owes</u> others)

Example 1

- On 1 March 2023, Admiral Group plc, a British motor insurer, announced its financial results for the year 2022
- At the end of 2022, the company had:
 - £7.7 million in tangible non-current assets and £69.0 million in intangible non-current assets
 - Current assets amounted to £793.6 million and current liabilities were £632.7 million
- Admiral Group had no non-current liabilities
- What is Admiral Group's balance sheet model?

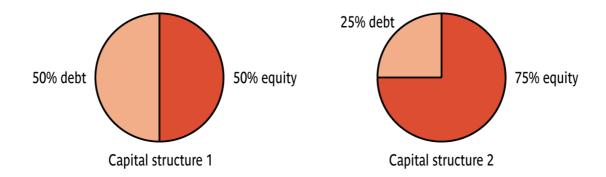
Admiral Group's balance sheet

Capital structure

Debt	Equity
 Debt financing = borrowing money and paying back with interest Examples: corporate bonds, loans Providers of debts: bond holders, creditors, debt holders 	 Equity financing = raising money by selling equity (shares) Providers of equity: equity holders, stockholders, shareholders

If we think of a firm as a pie:

Firm value = Value of bonds + Value of shares



What do you do as a financial manager?

Responsible for investment decisions

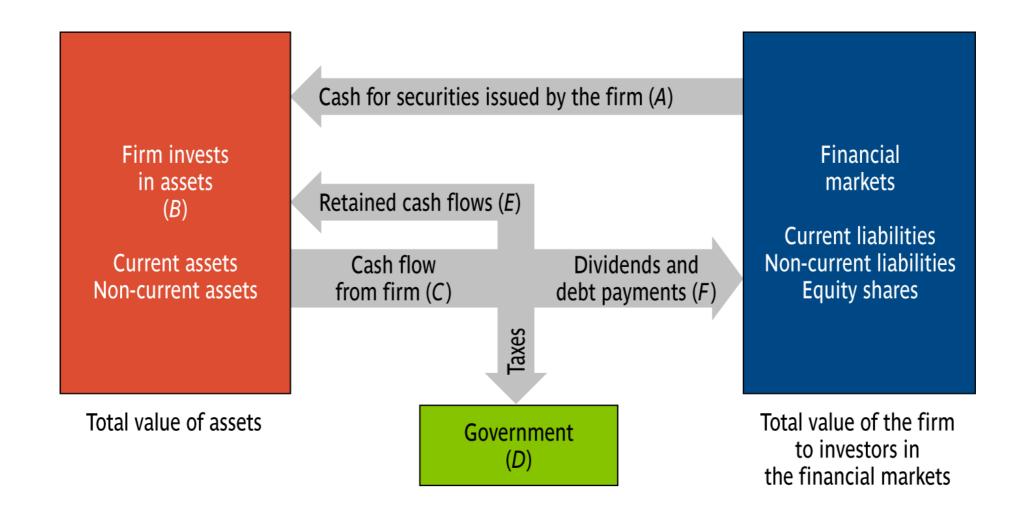
Responsible for financing decisions

Responsible for short-term financial planning

Oversee accounting and audit function in firm

Ensure the financial welfare of the firm

How cash flows...



Accounting flow vs. Cash flow (1)

- Midland plc is an Irish firm that refines and trades gold.
- At the end of the year, it sold 2,500 ounces of gold for €1.67 million.
- The company had acquired the gold for €1 million at the beginning of the year. The company paid cash for the gold when it was purchased.
- Unfortunately, it has yet to collect from the customer to whom the gold was sold.

Accounting flow vs. Cash flow (2)

Timing of cash flows

The Italian firm, Montana SPA, is attempting to choose between two proposals for new products. Both proposals will provide additional cash flows over a four-year period and will initially cost €10,000. The cash flows from the proposals are as follows:

Which one is better?

Year	New	New
	Product A	Product B
1	€ (0 € 4,000
2	(4,000
3	(4,000
4	20,000	<u>4,000</u>
Total	€20,000	€16,000

The risk of cash flows

- The Norwegian firm, Fjell ASA, is considering expanding operations overseas, and it is evaluating the Netherlands and South Africa as possible sites. The Netherlands is relatively safe, whereas operating in South Africa is seen as considerably riskier. In both cases, the company would close down operations after one year.
- After undertaking a complete financial analysis, Fjell has come up with the following cash flows of the alternative plans for expansion under three scenarios pessimistic, most likely, and optimistic:

	Pessimistic	Most Likely	Optimistic
Netherlands	750,000	1,000,000	1,250,000
South Africa	0	1,500,000	2,000,000

Which one is the best?

Book value vs market value

- Book value: the accounting value of a firm's assets
- Market value: the price at which willing buyers and sellers would trade the assets

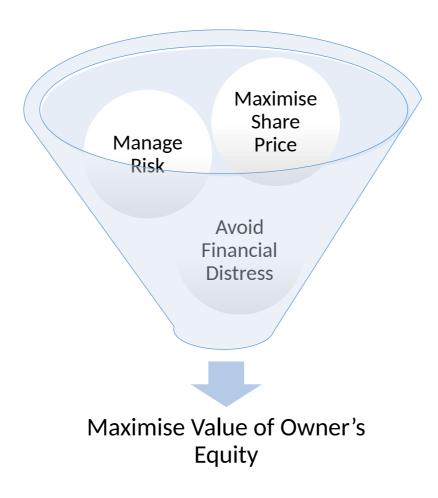
A firm's income statement



U.S. COMPOSITE CORPORATION Income Statement 2012 (\$ in millions)	
Total operating revenues	\$2,262
Cost of goods sold	1,655
Selling, general, and administrative expenses	327
Depreciation	90
Operating income	\$ 190
Other income	29
Earnings before interest and taxes (EBIT)	\$ 219
Interest expense	49
Pretax income	\$ 170
Taxes	84
Current: \$71	
Deferred: 13	
Net income	\$ 86
Addition to retained earnings:	\$ 43
Dividends:	43



The goal of financial management



Corporate tax rates

- Average tax rate: tax bill divided by taxable income, i.e., the percentage of income that goes to pay taxes
- Marginal tax rate: the tax you would pay (in %) if you earned one more dollar

Real world data

Please use one-time sign in to get access to WRDS database.

Quiz 1

Use the tax rates provided in the table below to calculate the tax bill if your firm has a taxable income of \$200,000. What is the average tax rate? What is the marginal tax rate?

Taxable Income	Tax Rate
\$ 0- 50,000	15%
50,001- 75,000	25
75,001- 100,000	34
100,001- 335,000	39
335,001-10,000,000	34
10,000,001-15,000,000	35
15,000,001-18,333,333	38
18,333,334+	35

Quiz 2

Travis, Inc., has sales of \$527,000, costs of \$280,000, depreciation expense of \$38,000, interest expense of \$15,000, and a tax rate of 35%. What is the net income for the firm?