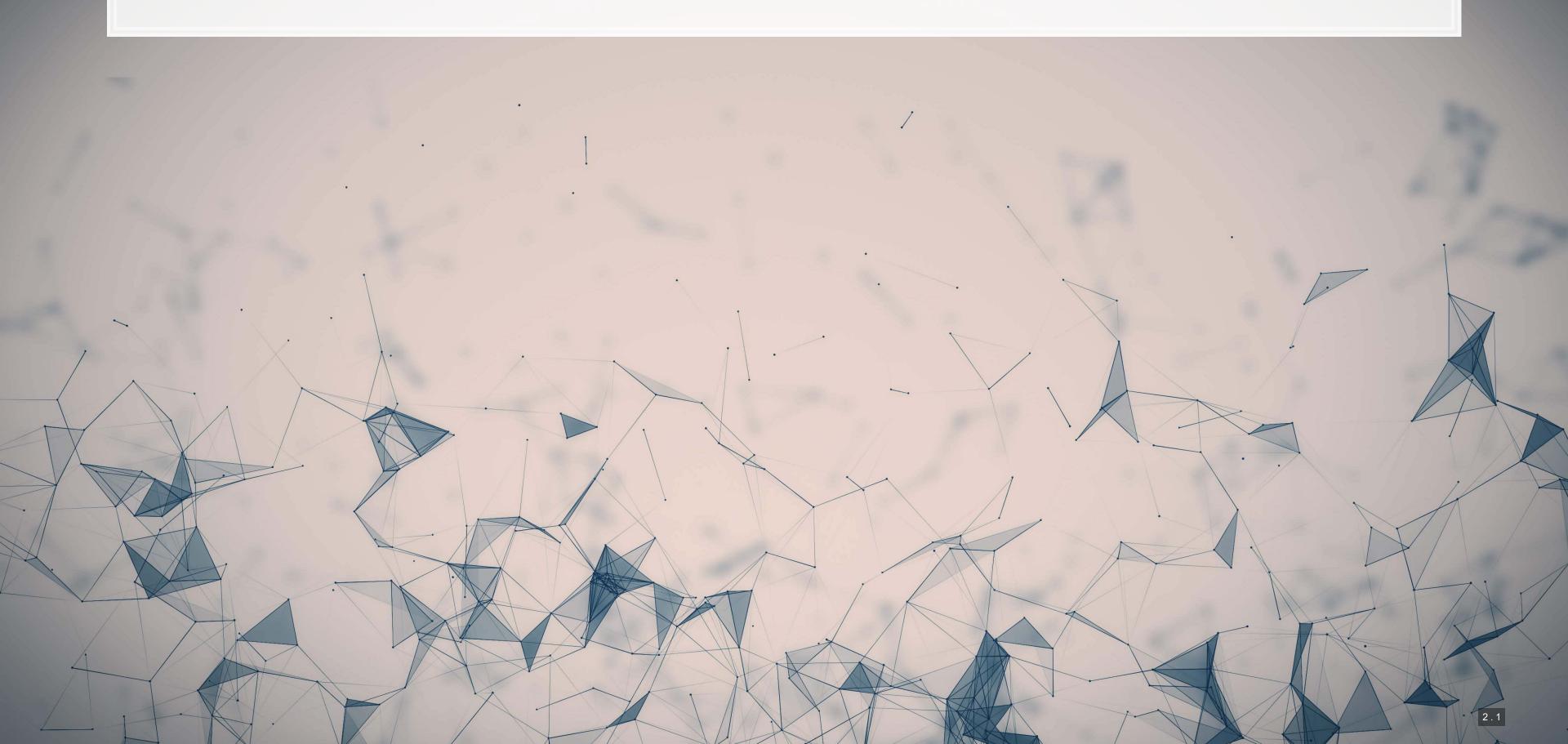
ACCT 101: Cash Flows

Session 9

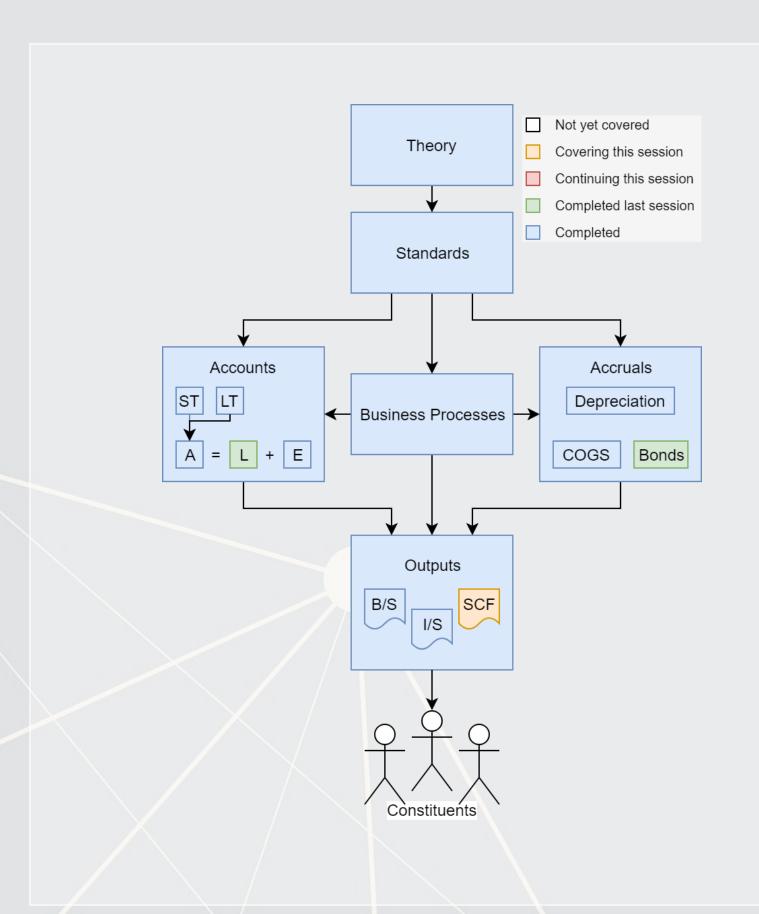
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Front matter



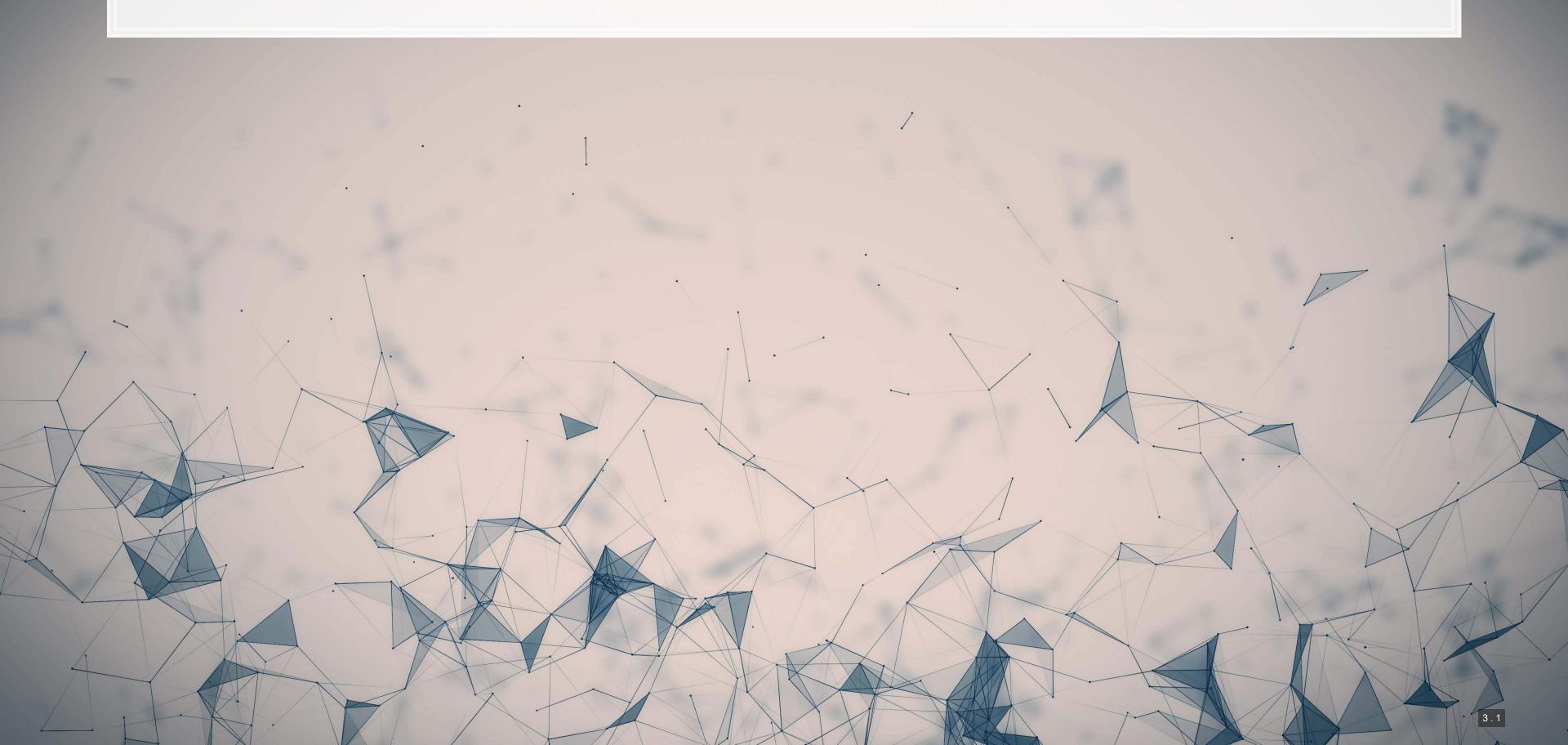
Learning objectives



Cash Flows

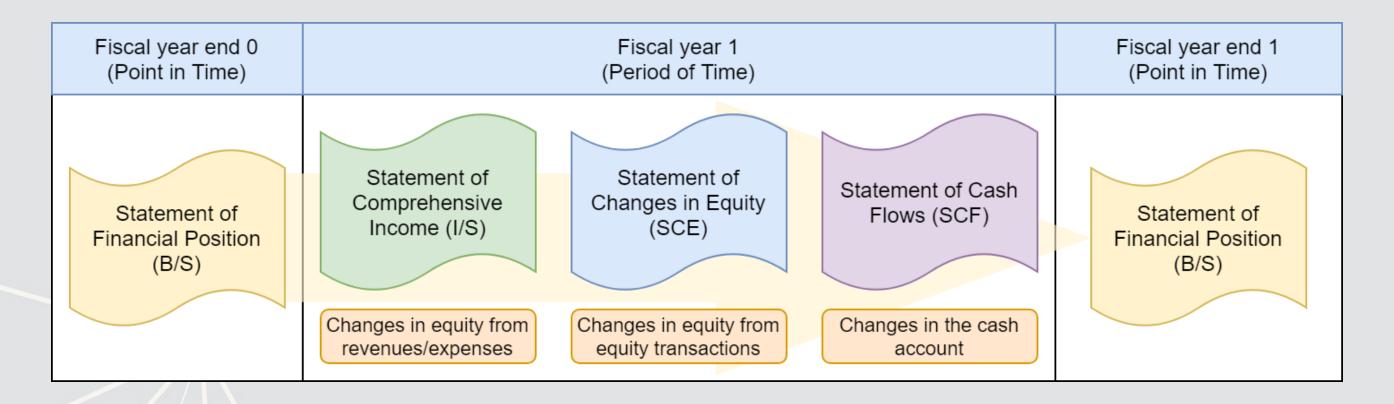
- 1. Understand why we have a Statement of Cash Flows
- 2. Identify cash flows from:
 - Operations
 - Investing
 - Financing
- 3. Identify significant non-cash activities
- 4. Apply the *indirect method*

Statement of Cash Flows



What is the SCF?

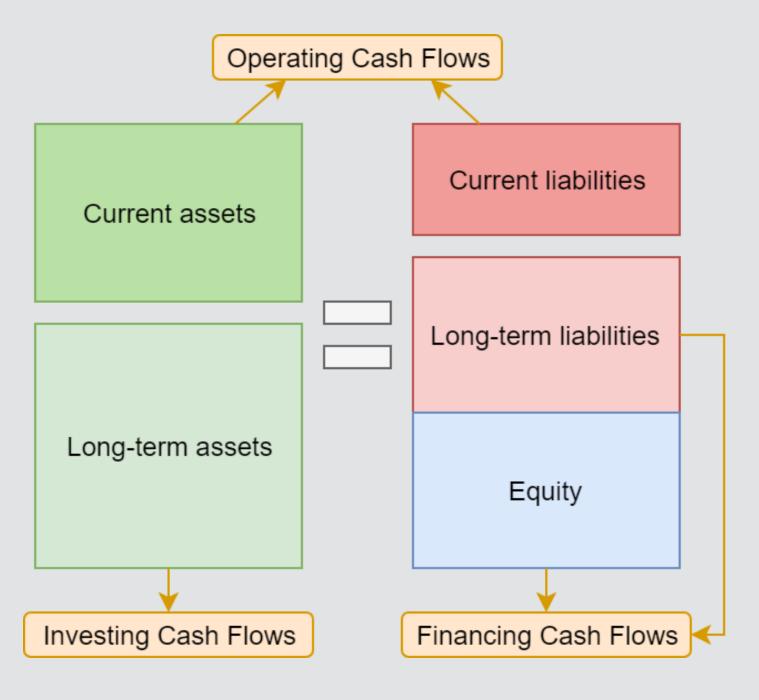
- Categorizes and presents all cash receipts and cash payments
 - Cash *inflows*: where cash came in from
 - Cash outflows: where cash went out to
- Describes cash changes over a period



Why use an SCF?

- Helpful in assessing companies'...
 - Ability to generate future cash flows
 - Ability to pay dividends
 - Difference between net income and change in cash
 - Investing and financing activities during the period
 - Value using DCF models (finance)
- Provides information on three types of cash flows, accounting for all cash flows of the company
 - Operating activities
 - Investing activities
 - Financing activities

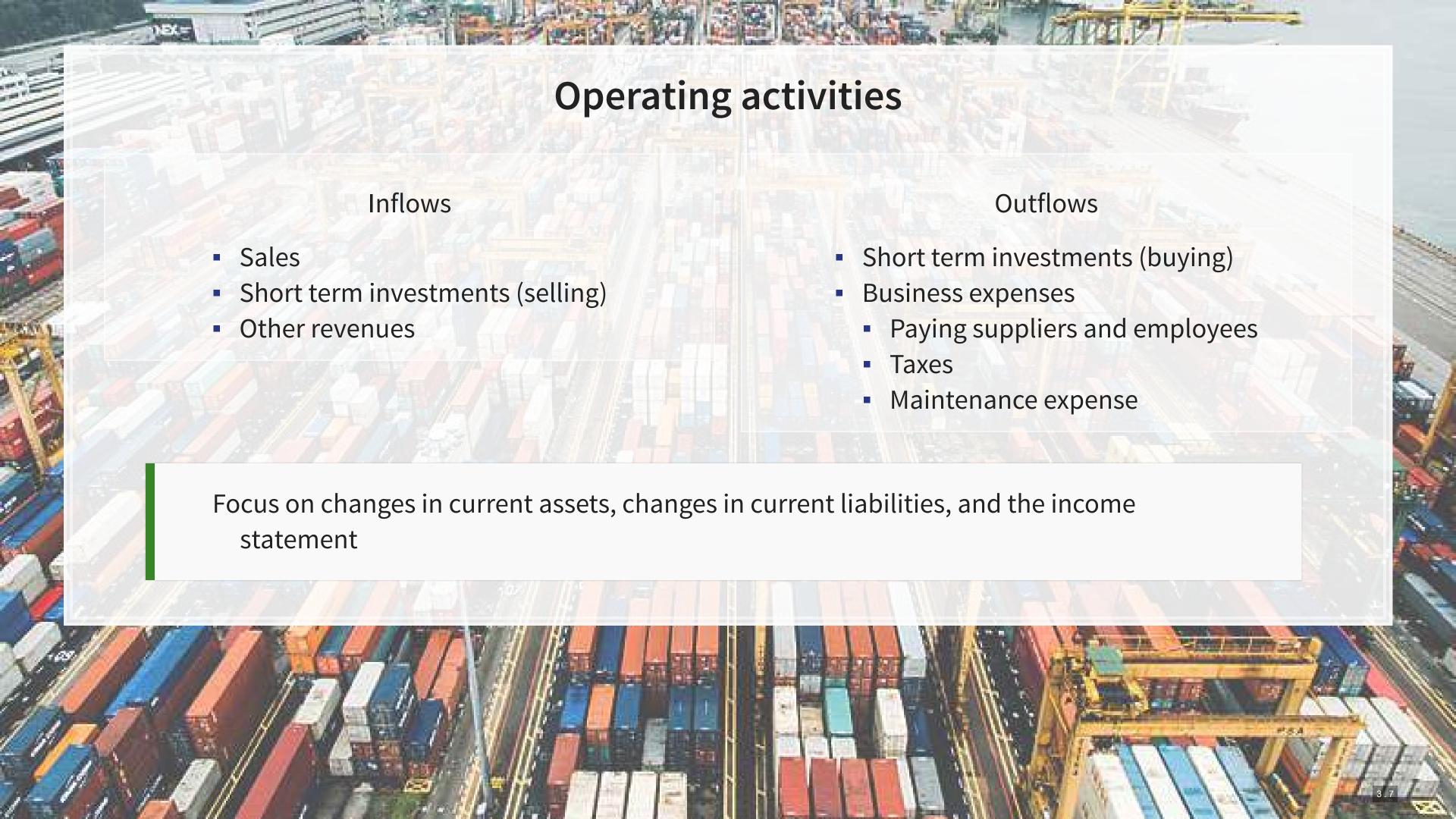
SCF and the balance sheet



Special cases: Interest and dividends

- IFRS, under IAS 7.31
 - Pick any categorization
 - Dividends paid/received can be any cash flow type
 - Interest paid/received can be any cash flow type
 - Keep it the same year-after-year
- US GAAP specifies where to put these follow this if you don't have a strong opinion on where to put interest and dividends
 - Inflows from dividends or interest: operating activities
 - Interest payments: operating activity
 - Dividend payments: financing activity







Investing activities

Inflows

- PP&E disposal
- Selling investments in other firms
- Collection of principal on loans made

Outflows

- Purchasing PP&E
- Purchasing investments in other firms
- Making loans

Focus on PP&E

Financing activities

- Cash-based increases and decreases in long-term liabilities and shareholders' equity
- Useful in:
 - Predicting future claims on cash
 - Identifying how a company is financed
 - Internally vs. externally



Financing activities

Inflows

- Receiving loans
- Issuing stock
- Selling treasury shares

Outflows

- Paying back loans
- Buying treasury shares

Focus on long term liabilities and shareholders' equity

Significant non-cash activities

- Includes:
 - Issuing common stock in exchange for PP&E
 - Bond conversion (Bond \rightarrow equity)
 - Debt issuance for PP&E
 - PP&E exchange
- Useful in:
 - Determining other future claims on cash
 - Getting a more complete picture of financing and investments
- Reported at the bottom of SCF or in supplementary schedule

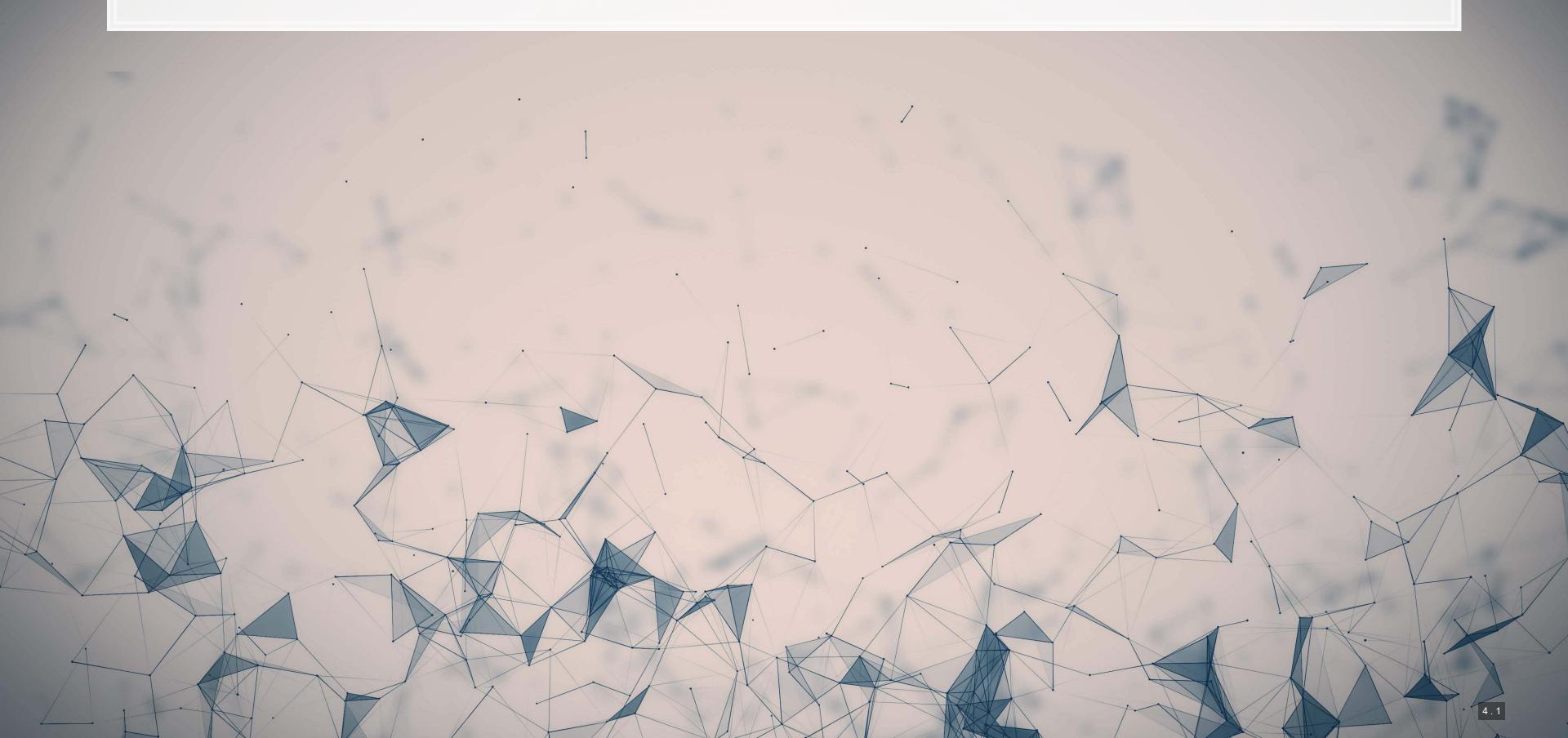
Practice: Identifying cash flows

What type of cash flows are each of the following? [Operating/Investing/Financing/Non-cash/None]

If it is a cash flow, is it an inflow or outflow?

- 1. Reissue treasury shares for a warehouse
- 2. Pay off a note payable
- 3. Pay interest on a bond
- 4. Issue new shares for \$10 each
- 5. Pay accounts payable
- 6. Record \$10,000 depreciation on PP&E
- 7. Sell machinery at a loss
- 8. Sell land
- 9. Pay a dividend
- 10. Buy a warehouse
- 11. Sell goods for cash

Operating cash flows



Operating cash flows

Two equivalent methods:

Indirect method

- Backs out operating cash flow by starting with net income and adjusting out accruals
- Most commonly used
- Easiest to do

Direct method

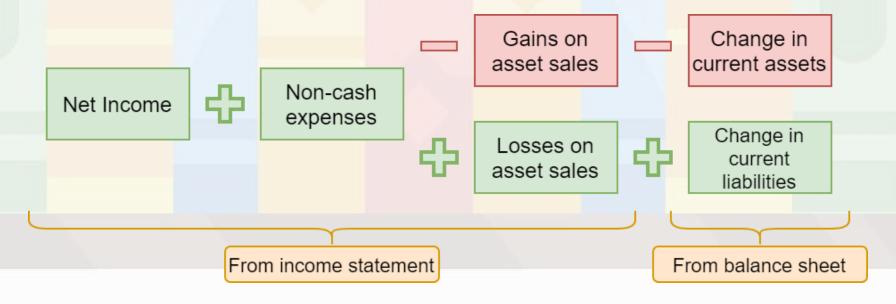
- Tracks and reports exactly where operating cash flows came from
- Preferred by IFRS
- Most useful for investors

Both methods will get you to the same operating cash flow amount

We will cover the direct method next week when we construct an SCF

Indirect method

- 1. Start with net income
- 2. Add back non-cash expenses (i.e., pure accruals)
 - Depreciation, depletion, amortization
 - Bond discount amortization
 - Bad debt expense, warranty expense
- 3. Subtract out any gains from asset sales included in net income
- 4. Add back any losses from asset sales included in net income
- 5. Subtract changes in current assets, except cash
- 6. Add changes in current liabilities



Indirect method: Calculation

- Steps 1 through 4 are available in the income statement
- Steps 5 and 6 can be calculated by comparing balance sheets
 - Current year versus prior year balance sheets
 - Compare change in accounts such as...
 - A/R
 - Inventory
 - Prepaid expenses
 - Accounts Payable
 - Unearned revenue

Example: Indirect method

Statement of Comprehensive Income Coffee Corp			
	Dec 31, 20X9	Dec 31, 20X8	
Revenue	72,000	54,000	
COGS	38,000	30,000	
Gross profit	34,000	24,000	
Depreciation expense	8,000	7,500	
Operating expenses	15,000	14,500	
Net income before tax	11,000	2,000	
Other revenues	6,000	0	
Tax expense	2,000	200	
Net income	15,000	1,800	

Statement of Financial Position Coffee Corp				
	Dec 31, 20X9	Dec 31, 20X8		
Cash	32,000	25,000		
A/R	6,000	4,000		
Inventory	10,000	12,000		
Accounts payable	8,000	7,000		
Utilities Payable	2,000	1,500		
Salaries Payable	3,000	2,500		

There was a 6,000 gain on asset sale during the year 20X9

To get the amount of operating cash flow for Kopi Corp, add all numbers highlighted in green and subtract all numbers highlighted in red

OCF =

- (1) NI
- (2) + Depreciation
- (3) Gain on asset sale
- (4) + Loss on asset sale
- (5) $\Delta A/R$ $\Delta Inventory$
- (6) + $\Delta A/P$ + $\Delta Utilities$ Pay. + $\Delta Salaries$ Pay.

OCF =

- (1) 15,000
- (2) + 8,000
- (3) 6,000 (4) + 0 [none in this problem]
- (5) 2,000 (-2,000)
- (6) + 1,000 + 500 + 500
- = 19,000

Practice: Indirect method

You find the following information in Kopi Corp's 20X9 and 20X8 financial statements. Based on this information, what is their operating cash flow for 20X9?

Statement of Comprehensive Income Kopi Corp				
	Dec 31, 20X9	Dec 31, 20X8		
Revenue	33,000	64,500		
COGS	4,500	6,000		
Gross profit	28,500	58,500		
Depreciation expense	15,000	15,000		
Operating expenses	20,000	13,000		
Net income before tax	(6,500)	30,500		
Tax expense	0	3,000		
Net income	(6,500)	27,500		

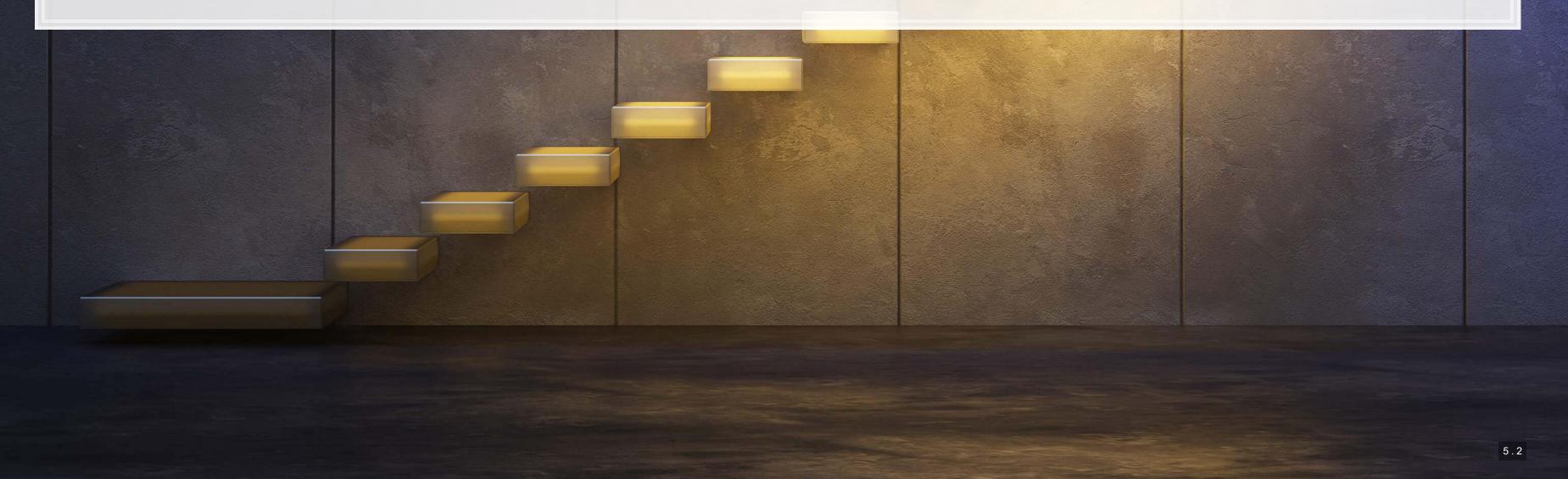
Furthermore, there was a 3,000 loss on asset sale during the year 20X9

Statement of Financial Position Kopi Corp				
	Dec 31, 20X9	Dec 31, 20X8		
Cash	45,000	40,000		
A/R	4,000	10,000		
Inventory	6,000	4,500		
Accounts payable	2,000	10,000		
Utilities Payable	1,000	5,000		
Salaries Payable	2,000	2,000		





- For next week
 - 1. Do Quiz 2 on eLearn!
 - 2. Reading
 - Chapter 11 (Cash flows)
 - 3. Take a week and relax (or work on the project)
 - 4. Extra practice available
 - Cash flows eLearn quiz



Packages used for these slides

- kableExtra
- knitr
- revealjs