ACCT 101: Financial Statements; Equity

Session 3

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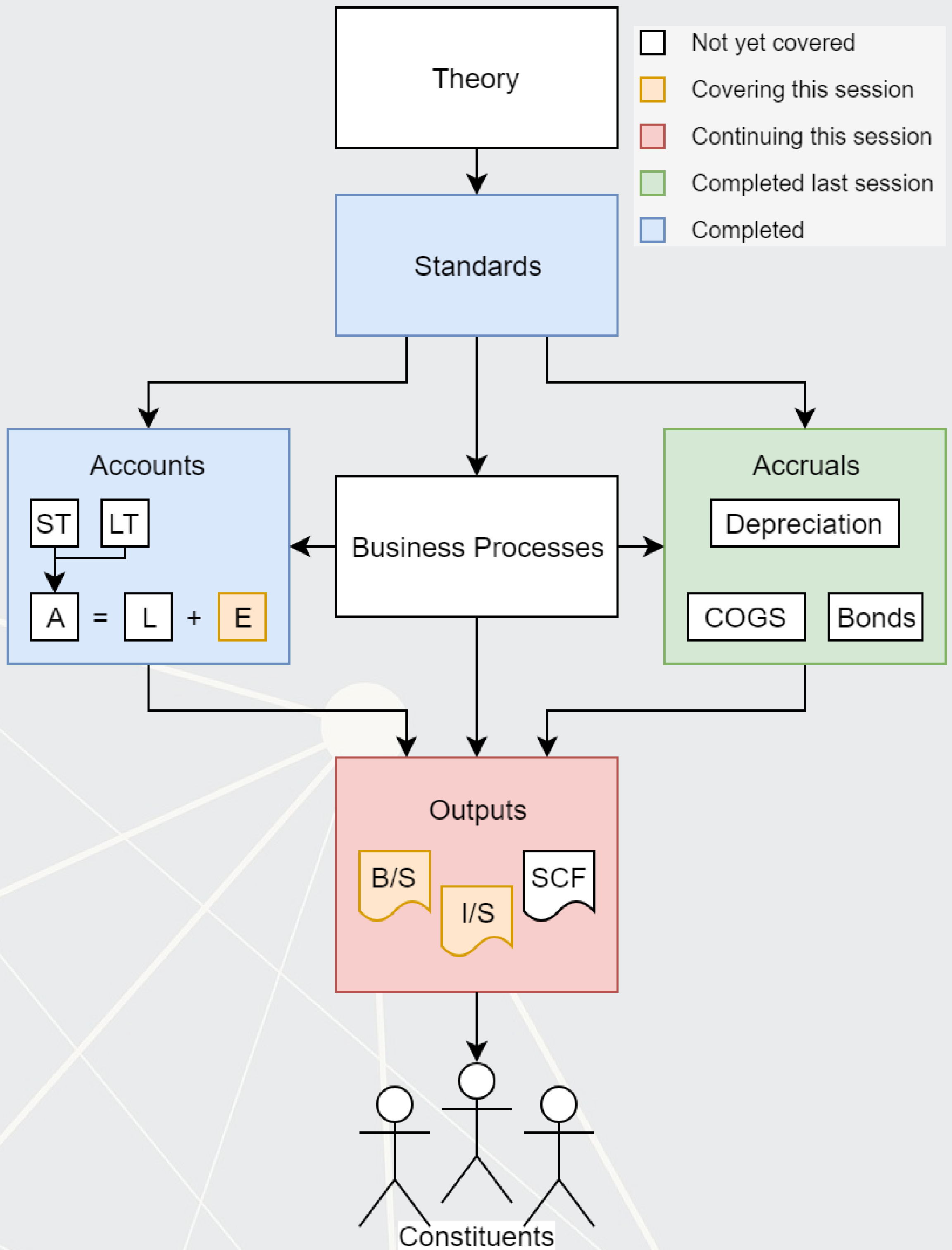
Frontmatter

Frontmatter

- Homework 1 should be submitted soon
  - Submit on eLearn if you haven't
- Homework 2 due next week
  - Looking through real annual reports
  - Largely open ended and will be graded for completion
    - Some questions ask for your own opinion – there is no explicitly correct answer to these, since everyone has their own preferences
  - Look for it on eLearn

Learning objectives



Financial Statements (Ch 3)

1. Appreciate annual reports as a communication tool
2. Understand the presentation of the Statements of:
   - Financial Position
   - Comprehensive Income
   - Changes in Equity

Equity (Chapter 10)

1. Learn about the share structure of a corporation
2. Account for changing capital structure and dividends

Annual reports

What’s included

1. Corporate information
   - Name(s), history, key management/directors, structure
   - Awards, company description, operating statistics
2. Letter to shareholders
   - Written by CEO
3. Management Discussion and Analysis (MD&A)
   - Management writes this section
   - Often discuss:
     - The year’s performance
     - Possible future risks

What’s included

4. **Explicit and unreserved** statement of compliance to financial reporting standards.
5. Accounting statements
   - Statement of financial position
   - Statement of comprehensive income
   - Statement of changes in equity
   - Statement of cash flows
6. Statement notes
   - Often quite long, substance focused
   - Discusses important but difficult matters
   - Cannot rectify inappropriate accounting treatments
7. Acknowledgement of responsibility by management

Why are these important?

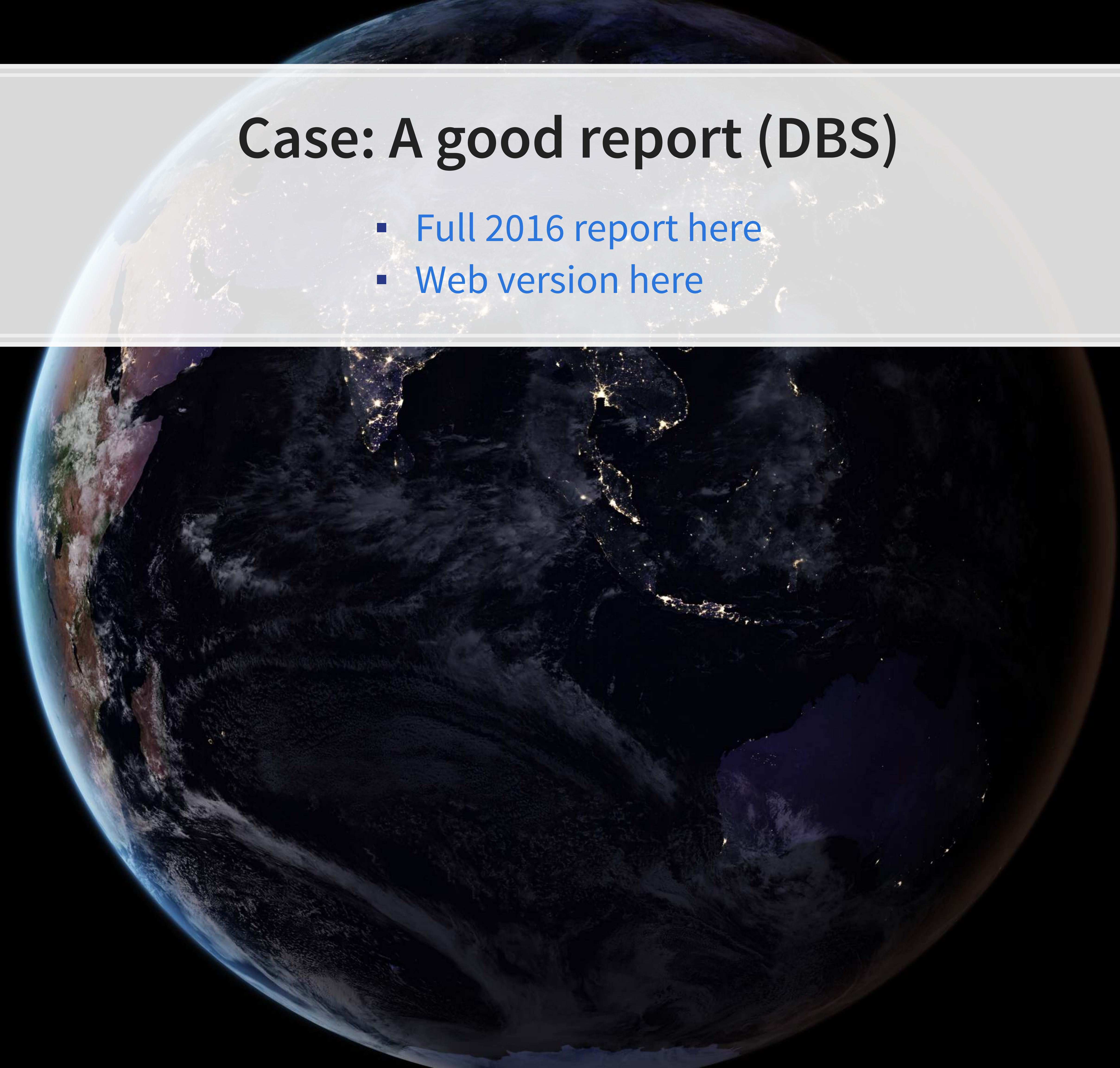
- If you ever need information about a company's financial standing, the annual and quarterly reports are your primary source.
- If you get information elsewhere (Bloomberg, Morningstar, etc.)…
  - They got it from there
    - Or from someone else who got it from there
- Contains a lot of other useful information about the companies

What you can find

- Financials
- Risks to the company going forward
- Legal issues
- Corporate strategy
- The company’s major customers
  - Very helpful for checking out competitors…
- Plenty more!

Case: A good report (DBS)

- Full 2016 report here
- Web version here



Case: A bad report (Groupon)

SEC filing S-1 1 a2203913zs-1

> We use **adjusted consolidated segment operating income**, or Adjusted CSOI, and free cash flow as key non-GAAP financial measures. Adjusted CSOI and free cash flow are used in addition to and in conjunction with results presented in accordance with GAAP and *should not be relied upon* to the exclusion of GAAP financial measures.

- End result
- Follow up analysis

Financial statements

General requirements

- Name of reporting entity, date ended, currency used, level of rounding
  - Or individual entity ("Consolidated report for…")
- Can group similar accounts together if immaterial
  - Not disclosing separately has no impact on F/S users
  - Cannot offset liabilities with assets, unless allowed
    - IAS 16, IAS 18
    - Foreign exchange gains and losses
- Must be done *at least* yearly (fiscal year)
- Usually provide comparative information for the past two periods

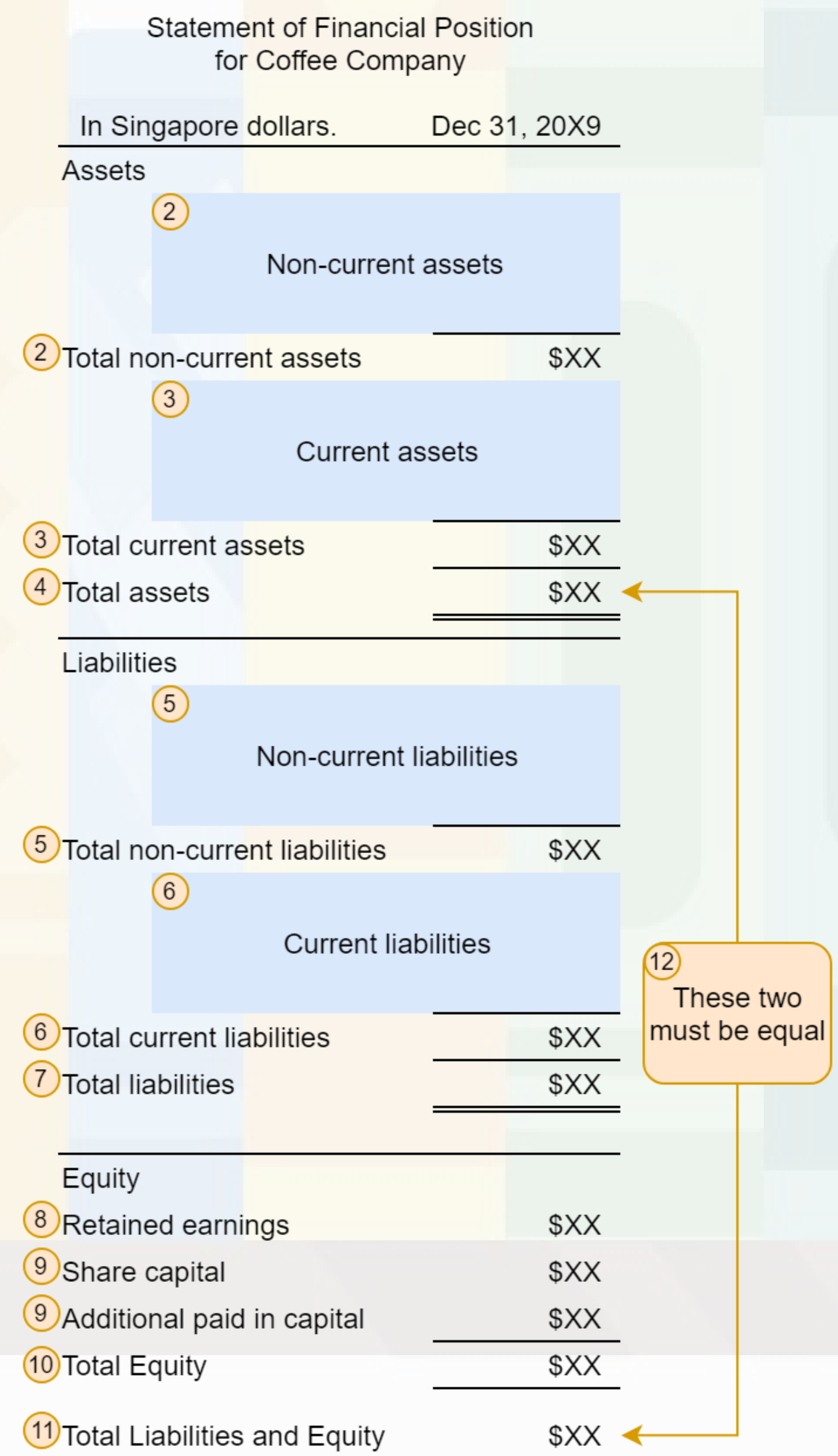
Statement of financial position

- Also known as a Balance Sheet (B/S)
- Presents:
  - Non-current assets (> 1 year in life)
    - PP&E, inventories (like submarines), intangible assets
  - Current assets
    - Cash (and equiv), trade, other financial assets, biological assets, inventory (typical items), receivables
  - Long term (> 1 year until paid off), then current liabilities
    - Provisions, other financial liabilities
  - Equity
    - Non-controlling equity interests, issued capital, reserves
    - Retained earnings

> Presents companies' *stock* of assets, liabilities, and equity

How to construct a SFP

1. Start with an adjusted trial balance
2. List all long term assets and sum
3. List all short term assets and sum
4. Total all assets
5. List all long term liabilities and sum
6. List all short term liabilities and sum
7. Total all liabilities
8. List retained earnings
9. List capital accounts
10. Total all equity accounts
11. Sum Total liabilities and equities
12. Verify $A = L + E$
13. Frequently include past year's amounts in neighboring columns



Statement of Comprehensive Income

- Also known as an Income Statement (I/S)
- Presents:
  - Revenue
  - Expenses, categorized by nature or function
    - Operating expenses
    - Non operating expenses
  - Net income
  - Below or separately it presents:
    - Gains and Losses
    - Called other comprehensive income (OCI)

> While taxes are always included, you will not be asked to calculate taxes for this course. If no taxes are mentioned, assume they are 0.

Constructing an SCI

1. Start with an adjusted trial balance
2. List revenue
3. List cost of goods sold (COGS)
4. Calculate *gross profit* (revenue - COGS)
5. List other expenses (except interest and taxes)
6. List other revenues (except interest and other holdings)
7. Calculate *operating profit*
8. List other non-tax expenses and incomes
    - Those that aren't included above
9. Calculate *income before taxes*
10. List taxes
11. Calculate *net income (loss)*
12. [Optional] start a new page
13. List OCI items (gains and losses)
14. List tax on OCI
15. Calculate *OCI, net of tax*
16. Calculate *total comprehensive income*
    - OCI, net of tax + net income (loss)
17. Often includes the prior years in neighboring columns

Statement of Comprehensive Income
for Coffee Company

In Singapore dollars	Dec 31, 20X9
2 Revenue	$XX
3 Cost of goods sold	$XX
4 Gross profit	$XX
5 Other expenses (excluding interest and taxes)	
6 Other incomes (excluding interest and other holdings)	
7 Operating profit	$XX
8 Other expenses (except taxes)	
8 Other incomes	
9 Income before taxes	$XX
10 Taxes	
11 Net income (loss)	$XX

12

Other Comprehensive income	
13 OCI items (gains and losses)	
14 Tax on OCI	
15 OCI, net of tax	$XX
16 Total comprehensive income	$XX

Statement of Changes in Equity

- Reconciles from period start to end
  - Per IAS 1,must reconcile each equity item separately as well as the total
- Shows all transactions with owners
- Shows all dividends paid (can be as a note to the statement)
- This statement often relies on information that is contained outside the adjusted trial balance

> You won't be required to construct this statement for exams.

Constructing an SCE

1. List all equity items across the top as columns
    - Generally includes: share capital, APIC, retained earnings, treasury stock, total equity
2. Put “balance as of [beginning date]” as the first row
3. List all items that effected 1 of the columns values for the year as the rows
    - Generally includes: share issuance, treasury share sales, dividends paid, net income
4. Put “balance as of [ending date]” as the last row
5. Fill out all changes
6. Often includes the prior year as well

Statement of Changes in Equity
for Coffee Company

In Singapore dollars	Dec 31, 20X9	
	1 Equity items	Total equity
Balance as of [start] 2	Balance as of [start]	
3 Items causing changes	5 Calculate changes	
Balance as of [end] 4	Balance as of [end]	

Statement of Cash flows

- We’ll get back to this…
  - Sessions 10 and 11
  - Chapter 11

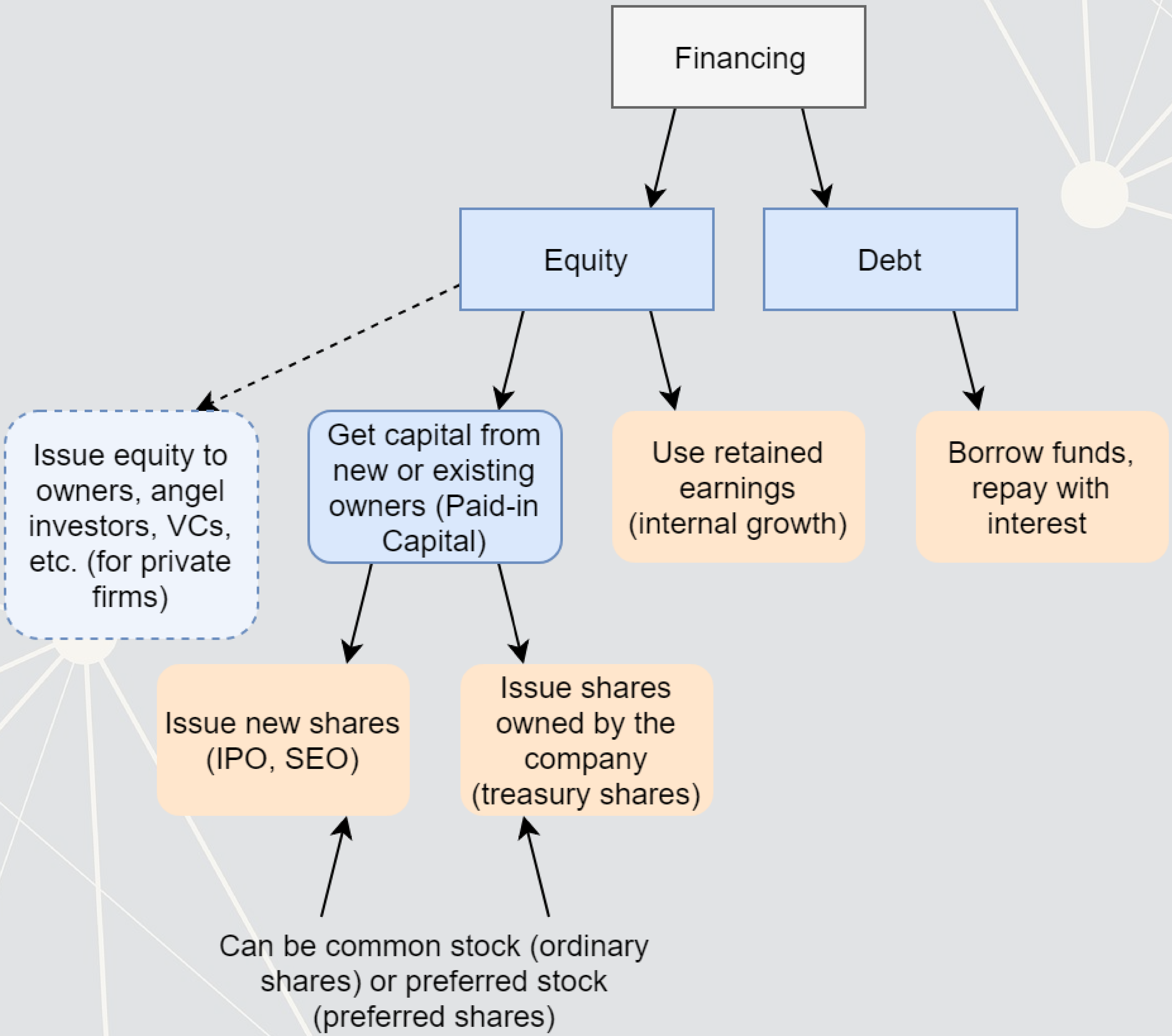
Practice

- Practice problem on eLearn for Coffee Corp (last week's company)
  1. Construct a Statement of Financial Position
     - Use the adjusted trial balance
     - Do for 2018
  2. Construct a Statement of Comprehensive income
     - Use the adjusted trial balance
     - Do for 2018
     - Ignore taxes
  3. If you have time, go back and do for 2019 too!

> There is an Excel file on eLearn with the adjusted trial balances for 20X8 and 20X9.

Financing

Financing types



Equity vs debt

Equity:

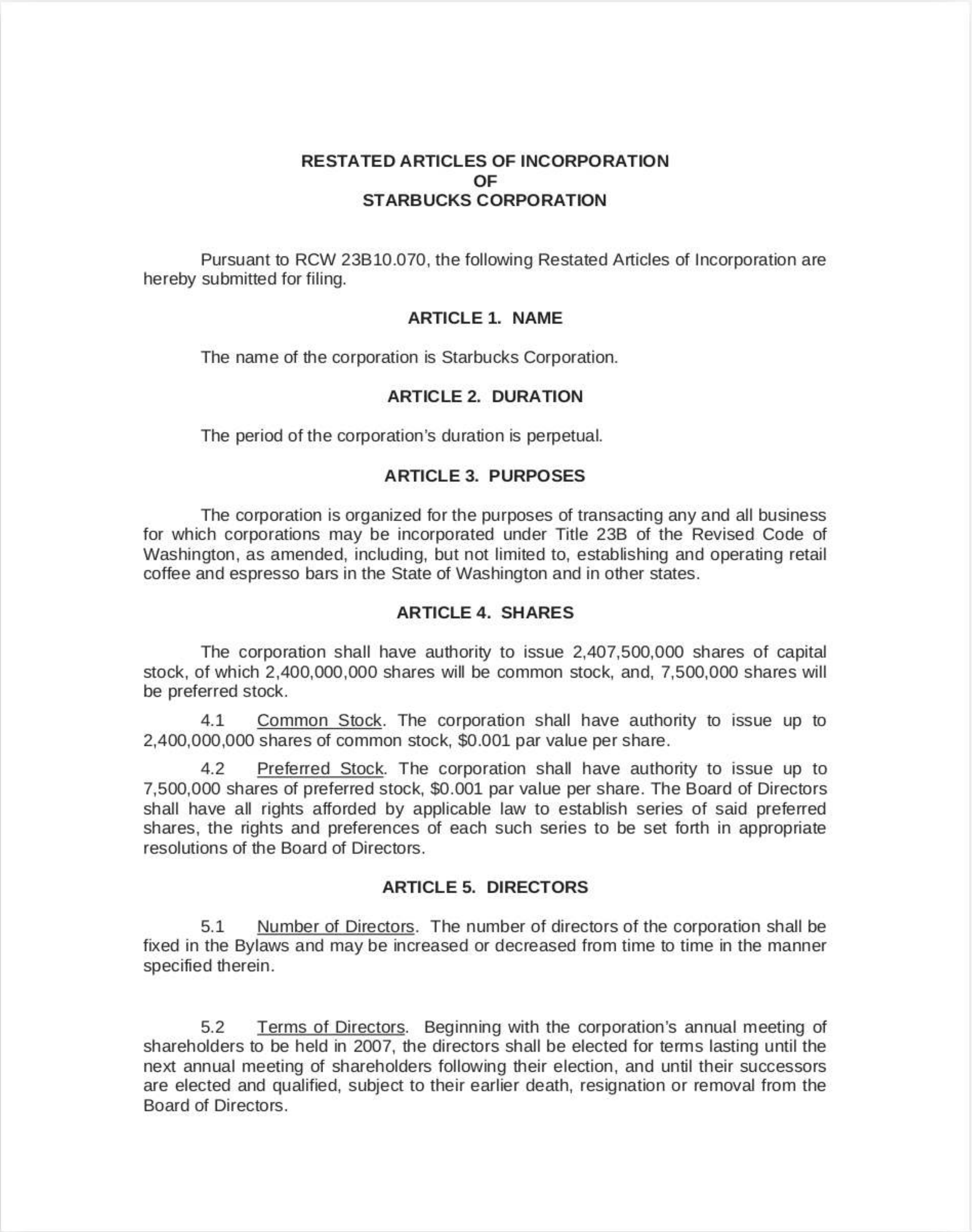
- Advantages:
  - No legal obligation to distribute profits
    - Great for growth
  - All profit can be reinvested
- Disadvantages:
  - Dilutes existing shareholders' ownership
    - Decreases the % of the company they own
  - More expensive
  - Can only be issued by a corporation

Debt:

- Advantages
  - Shareholders maintain ownership
  - Can be quicker to receive financing
- Disadvantages
  - Often need to pay periodic interest
    - Requires cash on hand to pay
    - Solvency risk $\Rightarrow$ bankruptcy

Articles of Incorporation

- Equity is governed by a coproations *articles of incorporation*
  - Also known as a *corporate charter*
- Written at the time of incorporation
  - When the company is created
- Governs:
  - Nature of business activities
  - Number of shares of stock
  - Intial board of directors



RESTATED ARTICLES OF INCORPORATION
OF
STARBUCKS CORPORATION

Pursuant to RCW 23B10.070, the following Restated Articles of Incorporation are hereby submitted for filing.

ARTICLE 1. NAME

The name of the corporation is Starbucks Corporation.

ARTICLE 2. DURATION

The period of the corporation's duration is perpetual.

ARTICLE 3. PURPOSES

The corporation is organized for the purposes of transacting any and all business for which corporations may be incorporated under Title 23B of the Revised Code of Washington, as amended, including, but not limited to, establishing and operating retail coffee and espresso bars in the State of Washington and in other states.

ARTICLE 4. SHARES

The corporation shall have authority to issue 2,407,500,000 shares of capital stock, of which 2,400,000,000 shares will be common stock, and, 7,500,000 shares will be preferred stock.

4.1 Common Stock. The corporation shall have authority to issue up to 2,400,000,000 shares of common stock, $0.001 par value per share.

4.2 Preferred Stock. The corporation shall have authority to issue up to 7,500,000 shares of preferred stock, $0.001 par value per share. The Board of Directors shall have all rights afforded by applicable law to establish series of said preferred shares, the rights and preferences of each such series to be set forth in appropriate resolutions of the Board of Directors.

ARTICLE 5. DIRECTORS

5.1 Number of Directors. The number of directors of the corporation shall be fixed in the Bylaws and may be increased or decreased from time to time in the manner specified therein.

5.2 Terms of Directors. Beginning with the corporation's annual meeting of shareholders to be held in 2007, the directors shall be elected for terms lasting until the next annual meeting of shareholders following their election, and until their successors are elected and qualified, subject to their earlier death, resignation or removal from the Board of Directors.

Corporations

Advantages

- Can raise both equity and debt
- Continuous life
- Ownership is liquid
- Limited liability for owners

Disadvantages

- Separation of ownership and management
  - Leads to conflicts of interest
- Other tax policies apply
  - *Double taxation*: A corporation's income is taxed and dividends to investors are taxed
    - Generally not an issue in Singapore
- More government regulation

Corporations

Public

- Public investment
- No cap on # of shareholders
- Increased regulation

Private

- No public investment
  - Some exceptions to this
- Fewer shareholders
- Less regulated

Share types

Ordinary shares

- Standard share type (most common)
- Has the four basic shareholder rights
- Benefits the most if the company succeeds
  - Takes on the most risk

Preferred shares

- Limited/no voting rights
- Earns a fixed dividend
  - Receives dividends before common shares
- Receives assets before common shares in liquidation
- May have other rights (convertible, redeemable, cumulative)
  - Varies from company to company

Shareholder rights

Voting

- For board of directors
- For important events

Dividends

- Right to share in profits (when dividends are declared)

Liquidation

- Right to share in asset value if company liquidates
  - After lenders get their share of value

Limited liability

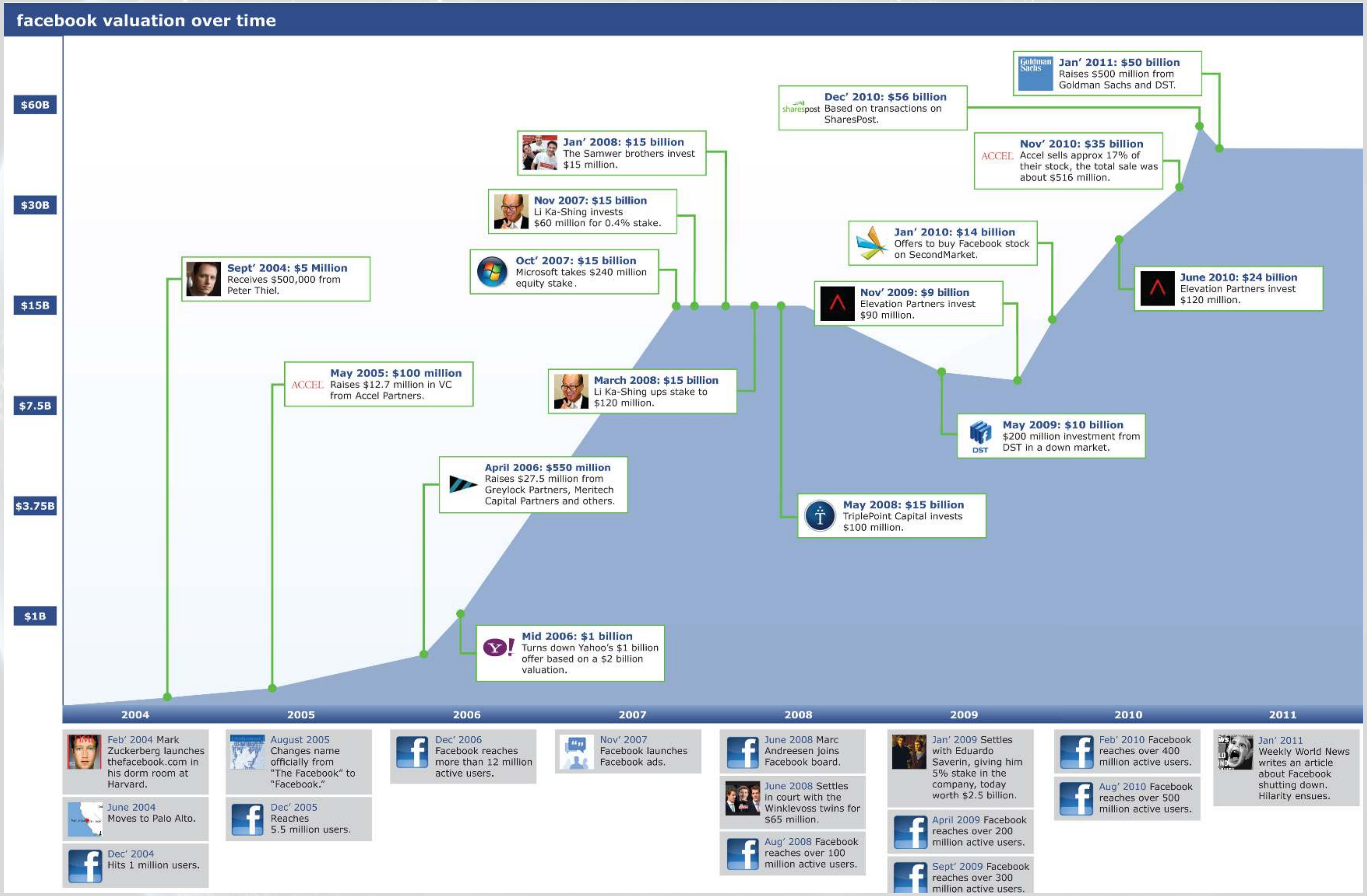
- Can only lose what was originally invested

> How shareholders protect themselves

Equity details

- Corporate charter stipulates the number of shares
  - Rare that a company has all such shares issued
- Investors hold shares
- The company holds treasury shares
  - Shares the company has bought back
- Unissued shares have never been issued
  - Can issue in an Initial Public Offering (IPO) or Secondary/Seasoned Equity Offering (SEO)
    - Requires government and exchange approval

Equity financing example: Facebook

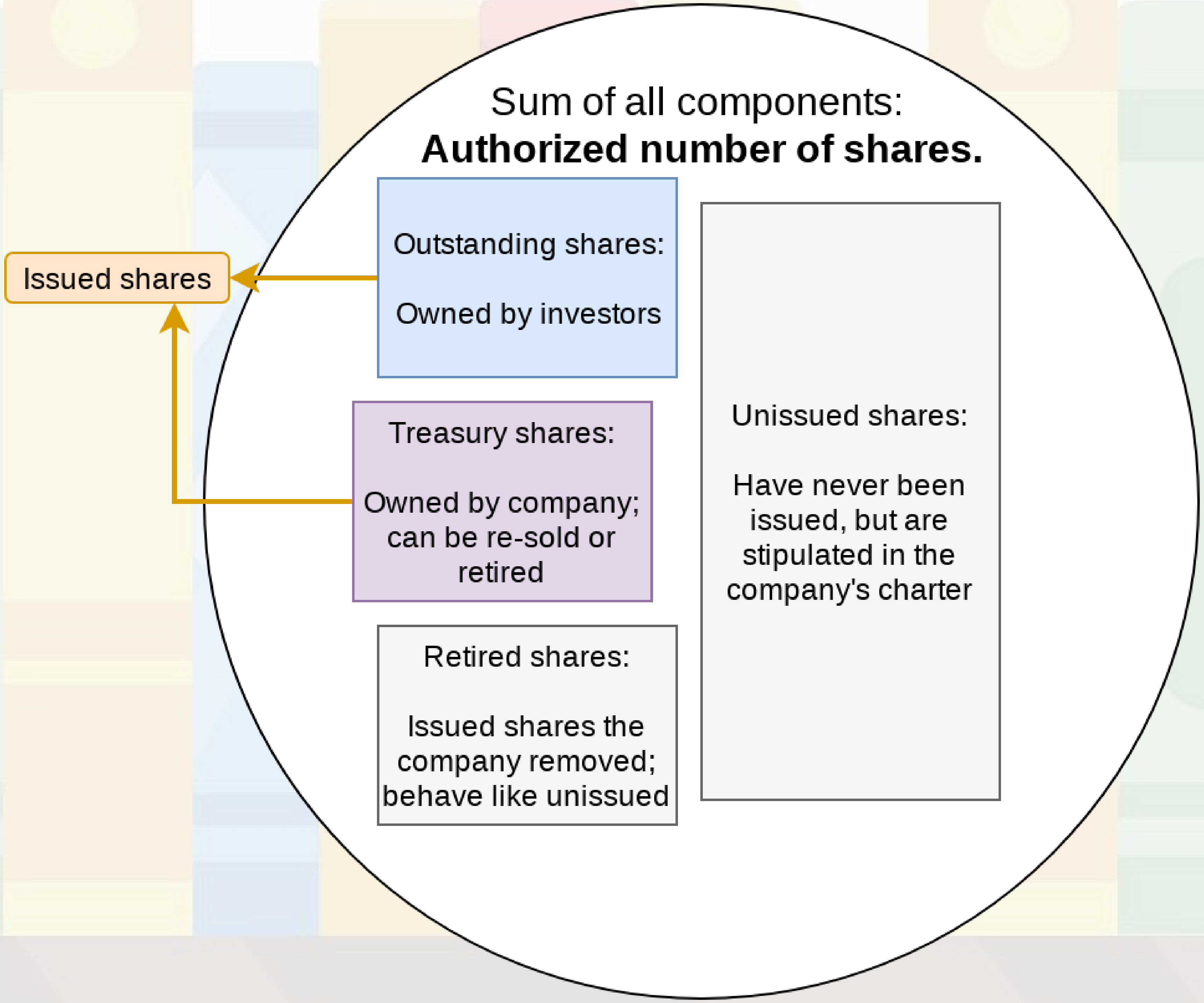


Accounting for Equity

Issuing shares

- Companies can issue shares from treasury or unissued shares
- Factors in issuing shares:
  1. Company's current health
  2. Company's outlook
  3. Expected dividends
  4. Economy health
  5. Market factors (liquidity)

Number of shares



Accounting for common stock

- *Singapore does not allow the par value method*
  - Still allowed in many countries
  - The book uses this mostly, so ignore the book on this topic!!!
- Simpler treatment in Singapore
- Note: The book uses the account name *Common stock*, which is commonly used in the U.S.

> Situation: The company issued 1 million ordinary shares at $15 each.

Example: Accounting for share issuance, Singapore

Date	Account	DR	CR
20YY.MM.DD	Cash	15,000,000	
	Share capital (ordinary shares)		15,000,000
Issued 1M ordinary shares for $15 each			

OK to put "Ordinary shares" as the account, or just "Share capital" if the company has no preferred shares

Par value method (NOT ALLOWED IN SG)

- Separate accounts for par capital and above-par capital
- Note: The book uses the account name *Additional Paid-in Capital*, which is common in the U.S.

> Situation: 1) The company issued 1 million ordinary shares at \$15 each with par value of \$15.
> 2) The company issued 1 million ordinary shares at \$15 each with par value of \$1.

Example: Accounting for share issuance, Par value method

Date	Account	DR	CR
20YY.MM.DD	Cash	15,000,000	
	Ordinary shares		15,000,000
Issued 1M ordinary shares for \$15 each, \$15 par value			

20YY.MM.DD	Cash	15,000,000	
	Ordinary shares		1,000,000
	Paid-in capital in excess of par		14,000,000
Issued 1M ordinary shares for \$15 each, \$1 par value			

Capital at par value

Capital above par value

Par value

- *Par value* is a value of a share of stock stipulated in the corporation's articles of incorporation
  - It has no relationship with the market value of the stock (stock price)
  - Ex.: Facebook has a par value of USD 0.000006/share
- Not used in Singapore since 2005

Preferred stock

- Separate account from common stock
  - Treated the same way
  - Append “preferred shares” to account names
- Fixed dividend (almost always)
- First call on dividends
- Earlier call on assets than common stock
  - Useful in bankruptcy
- No or limited voting rights
- Not actively traded

Accounting for preferred stock

- Using the same numbers as the common stock example
- Note: The book uses the U.S. account name, *Preferred stock*

Situation: The company issued 1 million preferred shares at $15 each.

Example: Accounting for share issuance, preferred shares, Singapore

Date	Account	DR	CR
20YY.MM.DD	Cash	15,000,000	
	Share capital (preferred shares)		15,000,000
Issued 1M preferred shares for $15 each			

Only change from common stock example

We almost always treat preferred shares as **equity**

The exception (IAS 32) is for redeemable shares with fixed redemption date and fixed dividend payments

Treasury stock

- Common stock that has been repurchased
- Reasons for repurchasing:
  1. Issue incentive compensation
  2. Increase stock price
     - By distributing cash to shareholders
  3. Use in trading
  4. Increase EPS
  5. Remove a shareholder (defensive)

Real world Example

https://rmc.link/101class3

Backup link: https://https://rmc.link/101class3backup

Treasury stock: Retirement

- Retirement removes the shares from share capital entirely

Situation: The company purchased 20,000 shares at $20 each, and then retired them.

Example: Purchasing and retiring treasury stock

Date	Account	DR	CR
20YY.MM.01	Treasury shares	400,000	
	Cash		400,000
Purchase 20,000 shares at $20 each as treasury shares			

20YY.MM.02	Share capital (ordinary shares)	400,000	
	Treasury shares		400,000
Retired 20,000 treasury shares originally purchased at $20 each			

Removes shares from circulation

Reversed purchase

Treasury shares: *contra equity* account, decreasing equity

Treasury stock: Reissuing at a profit

> Situation: The company purchased 20,000 shares at $20 each, and then sold them in 2 transactions: 10,000 for $25 each and 10,000 for $15 each.

Example: Purchasing and reissuing treasury stock at a profit

Date	Account	DR	CR
20YY.MM.01	Treasury shares	400,000	
	Cash		400,000
Purchase 20,000 shares at $20 each as treasury shares			

20YY.MM.02	Cash	250,000	
	Treasury shares		200,000
	Additional paid in capital		50,000
Sold 10,000 treasury shares at $25 (purchased at $20)			

Also known as "APIC"

Based on purchase price ($20)

Based on difference in prices ($25-$20=$5)

Example: Reissuing treasury stock at a loss with sufficient APIC

20YY.MM.03	Cash	150,000	
	Additional paid in capital	50,000	
	Treasury shares		200,000
Sold remaining 10,000 treasury shares at $15 (purchased at $20)			

Based on difference in prices ($15-$20=-$5)

Based on purchase price ($20)

Treasury stock: Reissuing at a loss

> Situation: The company purchased 20,000 shares at $20 each, and then sold them in 2 transactions: 10,000 for $15 each and 10,000 for $25 each.

Example: Purchasing and reissuing treasury stock at a loss

Date	Account	DR	CR
20YY.MM.01	Treasury shares	400,000	
	Cash		400,000
Purchase 20,000 shares at $20 each as treasury shares			

20YY.MM.02	Cash	150,000	
	Retained earnings	50,000	
	Treasury shares		200,000
Sold 10,000 treasury shares at $15 (purchased at $20)			

Holds excess losses

Based on difference in prices ($15-$20=-$5)

Based on purchase price ($20)

Example: Reissuing treasury stock after a loss

20YY.MM.03	Cash	250,000	
	Retained earnings		50,000
	Treasury shares		200,000
Sold remaining 10,000 treasury shares at $25 (purchased at $20)			

Based on difference in prices ($15-$20=-$5)

Based on purchase price ($20)

Treasury shares: Summary

- *Treasury shares* represents the issued shares held by the firm itself
- It is a contra equity because it takes away from owners' ownership

"Profit" from treasury shares

- Not considered actual profit (won't hit the I/S)
- Can fill in prior "losses" in retained earnings
- Can add to *Additional Paid-in Capital* (APIC)

"Losses" from treasury shares

- Not considered an actual loss (won't hit the I/S)
- Subtracts from APIC
- If APIC hits 0, subtract from *Retained earnings*

> All treasury shares transactions are based on actual amounts paid (market value)

Treasury stock: Putting it all together

> Situation: The company purchased 20,000 shares at $20 each, and then sold them in 3 transactions: 5,000 for $15 each, 5,000 for $26 each, and 10,000 for $18 each.

Example: Purchasing and reissuing treasury shares, complex transactions

Date	Account	DR	CR
20YY.MM.01	Treasury shares	400,000	
	Cash		400,000
Purchase 20,000 shares at $20 each as treasury shares			
20YY.MM.02	Cash	75,000	
	Retained earnings	25,000	
	Treasury shares		100,000
Sold 5,000 treasury shares at $15 each (purchased at $20)			
20YY.MM.02	Cash	130,000	
	Retained earnings		25,000
	Treasury shares		100,000
	Additional paid in capital		5,000
Sold 5,000 treasury shares at $26 each (purchased at $20)			

Reverse only debits from treasury share sales

Holds excess profit

Date	Account	DR	CR
20YY.MM.02	Cash	180,000	
	Retained earnings	15,000	
	Additional paid in capital	5,000	
	Treasury shares		200,000
Sold remaining 10,000 treasury shares at $18 each (purchased at $20)			

Holds excess loss

Reverse only APIC credits from treasury share sales

Treasury shares	
400,000	
	100,000
	100,000
	200,000
0	

Cash	
	400,000
75,000	
130,000	
180,000	
	15,000

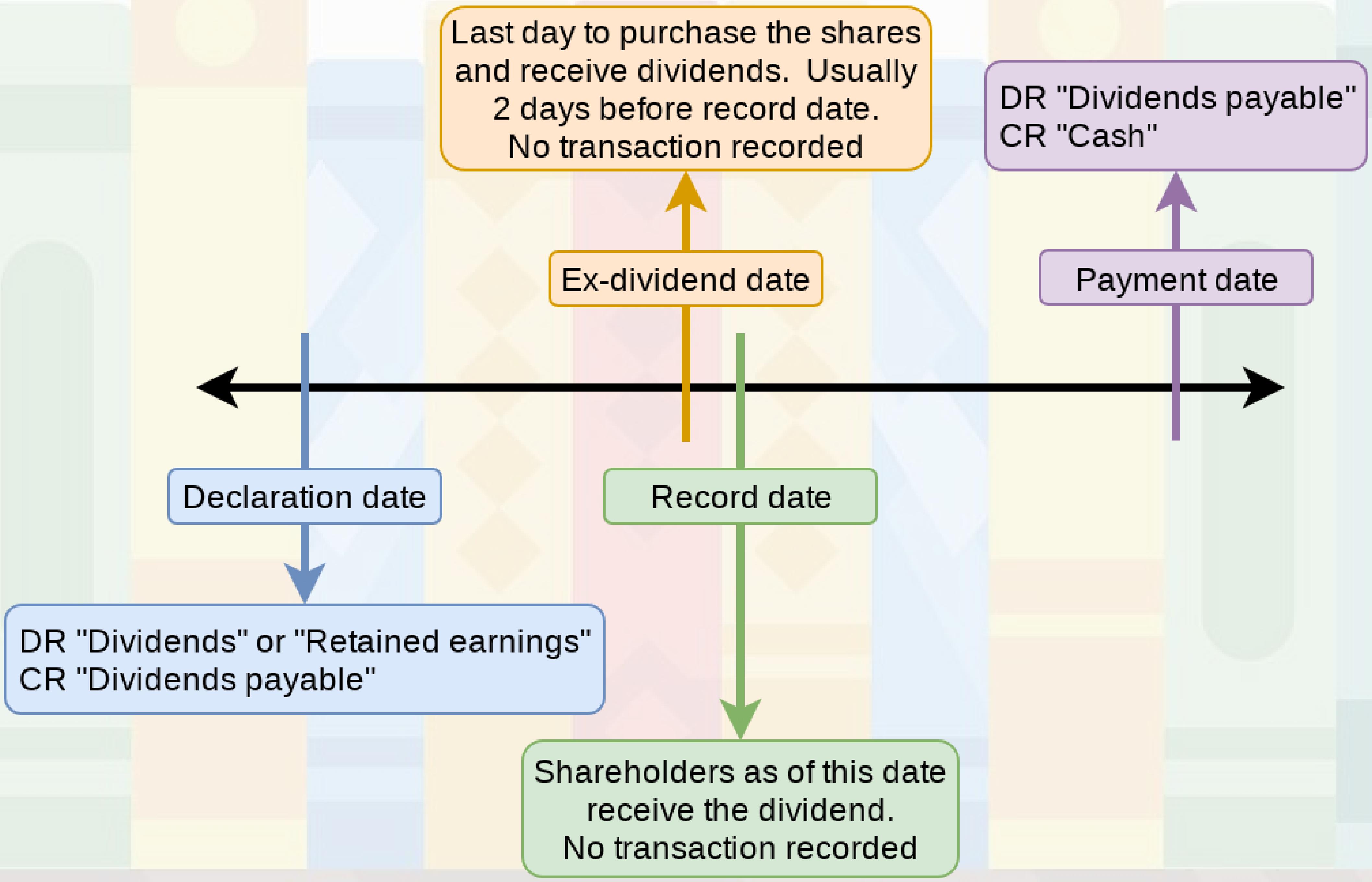
APIC	
	5,000
5,000	
	0

Retained earnings	
25,000	
	25,000
15,000	
15,000	

Dividends

- Cash dividends
  - Final dividend: year end, policy voted on by shareholders
  - Interim dividends: declared by board of directors
  - Need to have enough retained earnings on hand to declare the dividend
  - Need to have enough cash on hand to pay the dividend
- Share dividends
  - Proportional distribution of shares to shareholders
  - Shifts retained earnings to share capital
    - Increases number of outstanding shares

Dividends timeline



Recording cash dividends

> Situation: declared $0.10 per share of dividends on Jan 1, with record date of Jan 15 and payment date of Jan 30. 100,000 shares are outstanding.

Example: Cash dividends

Date	Account	DR	CR
20YY.01.01	Dividends	10,000	
	Dividends payable		10,000
Declared $10,000 in dividends			

Or Retained earnings

Dividend record date of 20YY.01.15 -- No journal entry needed

20YY.01.30	Dividends payable	10,000	
	Cash		10,000
Paid $10,000 in dividends			

Recording share dividends

- Shifting of values within equity accounts only
  - Record at market value

> Situation: declared 0.05 shares per share as a share dividend on Jan 1. 100,000 shares are outstanding with a market value of $10 each.

Example: Share dividends

Date	Account	DR	CR
20YY.01.01	Retained earnings	50,000	
	Share capital (ordinary shares)		50,000
Declared share dividend of 100,000 shares x $10/share market price x 0.05 shares/share			

Stock split

- Exchange all common shares at a certain ratio
  - Such as a 2 for 1 stock split: receive an additional 1 share for every share owned
  - Not substantively different from a stock dividend
    - Just a larger change in the number of shares outstanding
- No accounting effects
- No journal entry

Summary of transactions

Transaction	Asset (↑=DR)	Liability (↑=CR)	Equity (↑=CR)
Issue shares	↑	–	↑
Purchase treasury shares	↓	–	↓
Sell treasury shares	↑	–	↑
Declare dividends	–	↑	↓
Pay dividends	↓	↓	–
Issue share dividends	–	–	–
Stock split	–	–	–

Practice Questions

- Take 5-10 minutes to work on this in groups

> Caffeine & Co had 50,000 shares outstanding as of Jan 1, 20X8. The following transactions occurred throughout the year. Prepare the journal entries for each transaction.

1. On January 30, Caffeine & Co purchased 10,000 shares for $10 per share.
2. On March 30, Caffeine & Co sold 2,000 treasury shares at $8 per share.
3. On April 1, Caffeine & Co declared a dividend of $0.05 per share. The date of record was April 15th, with payment on May 30th.
4. On May 1, Caffeine & Co sold 6,000 treasury shares at $15 per share.
5. On May 30, Caffeine & Co paid the previously declared dividend
6. On October 31, Caffeine & Co sold its remaining 2,000 treasury shares at $8 per share.

Practice Questions

Practice questions solution

Date	Account	DR	CR
20X8.01.30	Treasury shares	100,000	
	Cash		100,000
Purchase 10,000 shares at $10 each as treasury shares.			
20X8.03.30	Cash	16,000	
	Retained earnings	4,000	
	Treasury shares		20,000
Sold 2,000 treasury shares at $8 per share.			
20X8.04.01	Dividends	2,100	
	Dividends payable		2,100
Declared a dividend of $0.05 per share.			
20X8.05.01	Cash	90,000	
	Treasury shares		60,000
	Retained earnings		4,000
	Additional paid in capital (APIC)		26,000
Sold 6,000 treasury shares at $15 per share.			
20X8.05.30	Dividends Payable	2,100	
	Cash		2,100
Paid the dividend declared on 20X8.04.01.			
20X8.10.31	Cash	16,000	
	Additional paid in capital (APIC)	4,000	
	Treasury shares		20,000
Sold 2,000 treasury shares at $8 per share.			

Decreased retained earnings because we have 0 balance in the additional paid in capital account.

[50,000 shares outstanding - 8,000 treasury shares] x $0.05/share dividend = $2,100

Technically not required; could be included in APIC instead.

This is the exact same transaction as on 20X8.03.30, but the journal entry is different because we have APIC.

End Matter

For next week

1. Recap the reading for this week
2. Read the pages for next week
   - Control Systems (Chapter 4)
3. Homework to *turn in next week*
   - Available on eLearn
   - Submit on eLearn
4. Practice on eLearn
   - Extra Excel practice on B/S and I/S
   - Practice quizzes on both F/S and equity
     - Automatic feedback provided

Packages used for these slides

- curl
- kableExtra
- knitr
- quantmod
- revealjs

Custom code

```
# Pull and cache stock quotes
library(quantmod)
library(curl)
Quote <- function(name) {
  if(has_internet()) {
    quote <- getQuote(name)
    saveRDS(quote, paste0(name,'_quote.rds'))
  } else {
    quote <- readRDS(paste0(name,'_quote.rds'))
  }
  quote
}
```