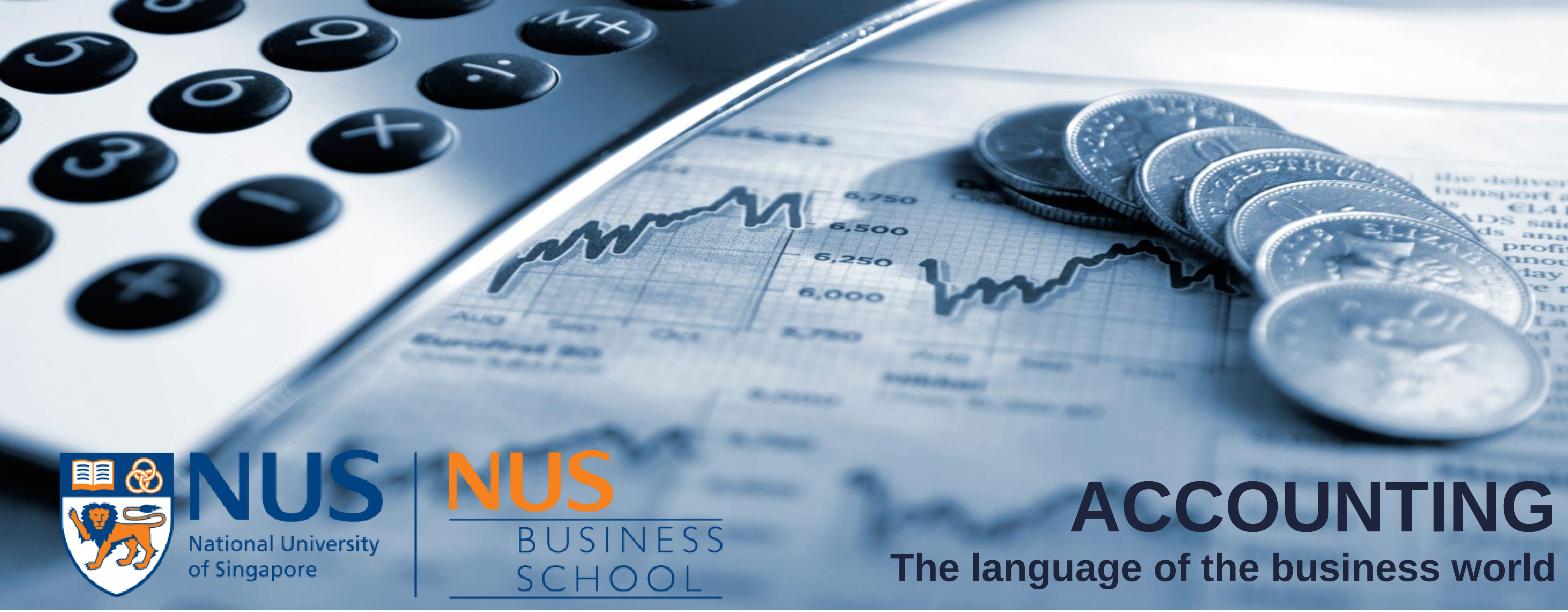


NUS National University of Singapore | NUS BUSINESS SCHOOL

ACCOUNTING

The language of the business world

ACC 1701X
Accounting for Decision Makers

Lecturer: Dr. Hanny Kusnadi

Prior Lecture Refresher

Chapter 05

- Potential Problems in Financial Statements
  - Unintentional errors
  - Disagreements in judgements & estimates
  - FRAUD
- Principles of Internal Controls
- Role of Auditors : Internal & External
- Earnings Management & Earnings Quality

Major Activities of a Business

Operating Activities: (associated with primary purpose of the business)

- Selling products or services
- Buying inventory for resale
- Incurring and paying for necessary expenses in the primary operations

Investing Activities:

- Purchase of assets (e.g. PPE, financial assets) for use in the business.
- Occur less frequently & involving larger amounts

Financing Activities:

- Raising money to finance a business either through equity financing (selling ownership of business) or debt financing (borrowing money from creditors)

Major Activities of a Business: What we will cover for the rest of the module

Operating Activities

- RECEIVABLES (Chapter 7) – selling products/services
- INVENTORY (Chapter 8) – acquiring products for resale
- CASH IN OPERATIONS (Chapter 6)
- CURRENT LIABILITIES

Financing Activities

- EQUITY FINANCING (Chapter 12)
- LT Debt Financing (not covered in this module)

Investing Activities

- PPE (Chapter 10) – buying and selling property, plant & equipment
- Investments (not covered in this module)

Financial Statements

- SCF (Statement of Cash Flow) (Chapter 14)
- FSA Analysis (Chapter 15)

Chapter 07

Receivables

Goals for Today

Concepts	▪ Accounts Receivables (AR) ▪ Notes Receivables
Accounting Procedures	▪ Direct write-off method vs Allowance method to account for impairment of AR ▪ Assessment of impairment under allowance method
Financial Analysis	▪ Accounts Receivables Turnover ▪ Average Collection Period

What are Receivables?

A receivable is an amount due from another party.

Accounts Receivables (Trade Receivables)

- Amounts due from customers for credit sales as a result of selling goods or providing services during the normal course of business.
- Fairly liquid asset – usually reported after cash and current investments on the Statement of Financial Position (SFP)

Notes Receivables

- A promissory note to pay a specified amount of money, usually with interest, either on demand or at a definite future date.
- Sometimes an accounts receivable can be converted to a note if a customer requests additional time to pay a past-due accounts receivable account.

Other Receivables

- E.g. Interest receivables, rent receivables, receivables from employees

Reporting Credit Sales Revenue

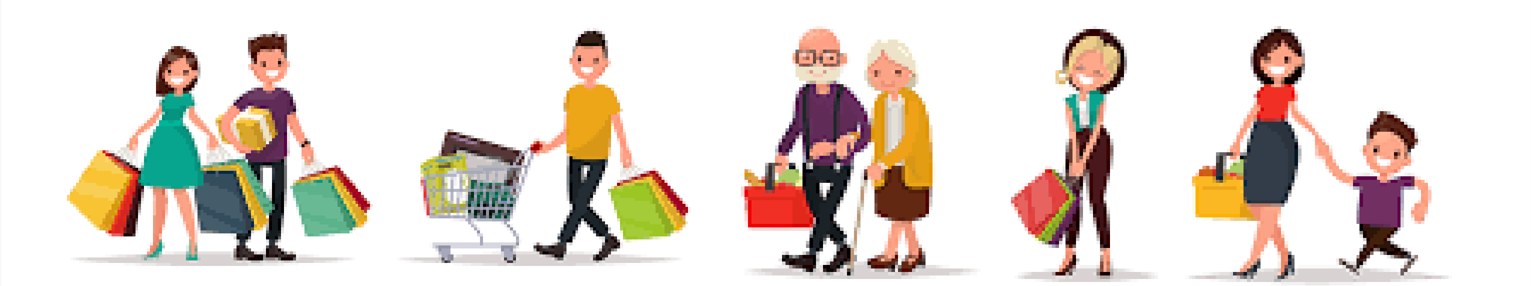
- To **record** credit Sales Revenue, the general journal entry which we have learnt is:

Dr	Accounts Receivable – Customer Name	XXX	
	Cr Sales Revenue		XXX

(Note: Remember to also recognize the related COGS)

- To **collect** on credit sales, the general journal entry which we have learnt is:

Dr	Cash	XXX	
	Cr Accounts Receivable – Customer Name		XXX



Accounts Receivables
Subsidiary Accounts vs. General Ledger

AR Ledger (Subsidiary Accounts):

Accounts Receivable - Co Alpha

1-Sep	500	
5-Sep	200	
Bal	700	

Accounts Receivable - Co Beta

23-Sep	100	
27-Sep	50	
Bal	150	

Accounts Receivable - Co Sigma

1-Sep	450	
Bal	450	

General Ledger:

Accounts Receivable

1-Sep	950	
5-Sep	200	
23-Sep	100	
27-Sep	50	
Bal @ 31 Sep	1300	

- Companies maintain a separate account for each customer and tracks the customer's purchases, payments and outstanding amount still owed to the company.
- This supplementary record is called accounts receivables ledger

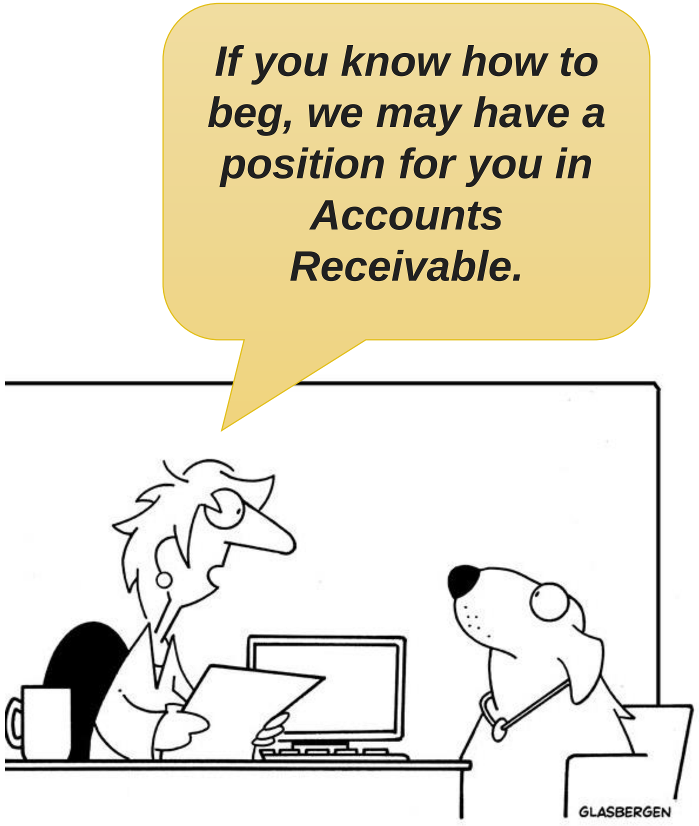
Valuing Receivables

Not all receivables are collectable!

- **FRS 109 (IFRS 9) : Accounts receivable should be assessed for any possibility of impairment (portion that may not be collectible ultimately)**
- Recall the Matching Principle:
  - Matching of revenues & expenses in the <u>same period</u>.
  - Therefore, a recording of **Expected Credit Loss (ECL)** for the uncollectible amounts in the same period that the sales occur is required!

NOTE: Variation of names for ECL you might see: Bad debt expense, Doubtful account expense, AR impairment loss, Uncollectible account expense.

** For the purpose of this module, you can use either ECL (Expected Credit Loss) or Bad Debt Expense.*



Valuing Receivables

There are two methods of accounting for credit loss:

(1) Direct Write-Off Method

- Not accepted under IFRS/GAAP
- Some companies may use it, when impairment losses are insignificant

(2) Allowance Method

- Accepted under IFRS/GAAP
- (i) Individual Assessment
- (ii) Group (Collective) Assessment : Aging of Accounts Receivable

(1) Direct Write-off Method

- Directly write off the customer's accounts receivable account to Expected Credit Loss (ECL) when it becomes clear that the amount is not collectible (i.e. turn bad):

Dr	Expected Credit Loss	XXX	
Cr	Accounts Receivable – Customer Name		XXX

- If account becomes collectible at a future date, a reversing entry to reinstate the accounts receivable is needed, plus a second entry to record cash received.

Dr	Accounts Receivable – Customer Name	XXX	
Cr	Expected Credit Loss		XXX
Dr	Cash	XXX	
Cr	Accounts Receivable – Customer Name		XXX

Not Accepted under IFRS / GAAP!

(2) Allowance Method

- Company does not wait for the accounts receivable to actually turn bad
- At the end of each period, company **estimates** the ECL for receivables that *may* turn bad based on signs of impairment.

Advantages of the allowance method:

(1) Recording ECL in the same period that related sales are recorded
→ Matching Principle

(2) Accounts receivable is reported on the Statement of Financial Position at the estimated amount of cash to be collected (i.e. Accounts receivable balance less allowance for ECL)
→ Gives a more realistic representation of the company's assets

(2) Allowance Method

2 Main steps in the Allowance Method:

1) Estimate and record ECL at the end of the period.
   - A contra-asset account called Loss Allowance (or Allowance for ECL/Allowance for Bad Debts) is used.
   - Usually through an AJE at the end of the period

2) Write-off specific customer's accounts receivable once they are determined to be uncollectible.
   - The contra-asset account Loss Allowance is reduced during write-offs
   - The customer's specific accounts receivable is removed
   - Can be done at any time in other periods

Loss Allowance
Takashimaya Example

E.g. At the end of **2022**, Takashimaya estimates that 10% of its $500,000 Accounts Receivable may be uncollectable. (10% x 500,000 = $50,000)

1) Record ECL:

Dec 2022	Expected Credit Loss	$50,000	
	Loss Allowance		$50,000

Stmt of Financial Position impact:

Accounts Receivable	500,000
Less Loss Allowance	(50,000)
Accounts Receivable (net)	450,000

Income Statement impact:

Revenues	XXX
Expenses:	
Expected Credit Loss	50,000

Loss Allowance
Takashimaya Example

2) Write off: In February **2023**, Soft Towel Store has gone bankrupt and Takashimaya determines that Soft Towel's accounts receivable of $2,500 will be uncollectible.

Feb 2023	Loss Allowance	$2,500	
	Accounts Receivable – Soft Towel (A)		$2,500

- Note that writing off uncollectible accounts did not affect any income statement accounts, because impairment loss (ECL) has already been taken in the period of 2022 during the period of sale.
- **The write-off also does not affect the realizable value of accounts receivable.**

	Before Write-Off	After Write-Off
Accounts Receivable	500,000	497,500
Less Loss Allowance	50,000	47,500
Accounts Receivable (reported on SFP)	**450,000**	**450,000**

Estimation of Loss Allowance

With effect from 1st Jan 2018, under **FRS 109 (IFRS 9)**:

- Expected Credit Loss (ECL) model is used to estimate impairment of accounts receivable.
- For short-term accounts receivable, loss allowance estimate should be equal to the lifetime expected credit losses.
- An entity may use a simplified "***provision matrix***" for calculating expected losses as a practical expedient for receivables.
    - Provision matrix may specify provision rates based on number of days an accounts receivable is past due → higher rates for longer due account: **AGING ANALYSIS**
    - Accounts may be grouped based on reasonable groupings such as geographical regions, product types, customer ratings, etc…

Steps in Estimation of Allowance

- The general approach to estimating the allowance is:

(1) Identify specific accounts with known credit problems → Individual assessment

(2) All other accounts receivable with no known credit problems → Group assessment using provision matrix to perform aging analysis:

Classify each receivable by how long it is past due.

Each age group is multiplied by its estimated uncollectible percentage.

Estimated loss allowance for each group are totaled.

(3) Estimates from individual and group assessment → total allowance required at reporting date

Estimation of Allowance
Example: Fab Co.

- Fab Company is estimating its loss allowance (relating to its AR) for the year of 2022 under IFRS.
- Its accounts receivable balance @ 31^{st} Dec 2022 is $600,000.
- Details of its accounts receivable balance is as follows:

AR Customers	**Amount**	**Status**
Customer – Cool Co.	$100,000	Objective evidence that Cool Co. is in trouble and some amount would be uncollectible.
All other customers	$500,000	No obvious evidence that accounts will be uncollectible

- Let's estimate the Loss Allowance for Fab Co.

Estimation of Allowance Example: Fab Co.
STEP 1 – Individual Assessment

- **Step 1: Individual assessment for specific accounts known to have credit problems.**

AR Customers	**Amount**	**Status**
Customer – Cool Co.	$100,000	Objective evidence that Cool Co. is in trouble and some amount would be uncollectible.
All other customers	$500,000	No obvious evidence that accounts will be uncollectible

- Suppose Fab Co. estimates that there is 90% chance that the entire amount owed by Cool Co. will be uncollectible: 90% x $100,00 = $90,000

Expected Credit Loss	90,000	
Loss Allowance		90,000

Estimation of Allowance Example: Fab Co.
STEP 2 – Group Assessment

- **Step 2: Group assessment for remaining accounts receivable balance**

AR Customers	Amount	Status
Customer – Cool Co.	$100,000	Objective evidence that Cool Co. is in trouble and some amount would be uncollectible.
All other customers	$500,000	No obvious evidence that accounts will be uncollectible

- Based on FRS 109 (IFRS 9), use provision matrix to collectively assess the accounts by performing an aging analysis
- Categorize all accounts receivables accounts according to their age. i.e. how long they are overdue at the reporting date (which for this example is @Dec 31, 2022).
- Uncollectible amounts are estimated for each age category.

Estimation of Allowance Example: Fab Co.
STEP 2 – Group Assessment (Aging Analysis)

- Aging Analysis for Fab Co. Accounts Receivables for group assessment:

Fab Co. Schedule of Accounts Receivable by Age 31 December 2022						
Customer	**Not Yet Due**	**1-30 Days**	**31-60 Days**	**61-90 Days**	**Over 90 Days**	**Total**
Company A	60,000	20,000	30,000	30,000	20,000	**160,000**
Company B	130,000	35,000	40,000	-	-	**205,000**
Company C	-	-	55,000	20,000	35,000	**110,000**
:	:	:	:	:	:	-
Company Z	-	-	-	-	25,000	**25,000**
Total	**190,000**	**55,000**	**125,000**	**50,000**	**80,000**	**500,000**
Estimated % Uncollectible	1%	5%	15%	25%	50%	
Estimated Loss	1,900	2,750	18,750	12,500	40,000	**75,900**

Percentage uncollectible is estimated based on historical loss experience and assessment of current economic condition

Target balance of the Loss Allowance account under Group Assessment (i.e. the allowance account is to be <u>adjusted</u> to this target balance)

Estimation of Allowance Example: Fab Co.
STEP 2 – Group Assessment (Calculating ECL)

Estimated Loss	1,900	2,750	18,750	12,500	40,000	**75,900**

- Based on our aging analysis, the **target balance** of the Loss Allowance account should be $75,900.
- We have to bring out Loss Allowance account to our target balance by adjusting the loss allowance account and recognizing ECL:
- ***Scenario 1:*** Suppose that the Loss Allowance had no existing balance
  ➔ adjustment needed: 75,900
- The adjusting journal entry is:

	Dr	Cr
Expected Credit Loss	75,900	
Loss Allowance		75,900

Loss Allowance

	Bal	0
	31-Dec	75,900
	End Bal	75,900

(Reminder: Loss Allowance is a contra-asset account, therefore it will have a normal credit balance)

Estimation of Allowance Example: Fab Co.
STEP 2 – Group Assessment (Calculating ECL)

- ***Scenario 2:*** Suppose that the Loss Allowance had an existing $27,000 normal balance before any adjustment ➔ adjustment needed: 75,900 – 27,000 = 48,900
- The adjusting journal entry is:

Expected Credit Loss	48,900	
Loss Allowance		48,900

Loss Allowance

		Bal	27,000
		31-Dec	48,900
		End Bal	75,900

- ***Scenario 3:*** Suppose that the Loss Allowance had an existing $13,000 abnormal balance* (debit balance) before any adjustment ➔ adjustment needed: 75,900 + 13,000 = 88,900
- The adjusting journal entry is:

Expected Credit Loss	88,900	
Loss Allowance		88,900

Loss Allowance

Bal	13,000		
		31-Dec	88,900
		End Bal	75,900

**An abnormal balance arises when there are more write-offs than allowances. This happens when companies underestimate their allowance for impairment of AR.*

Estimation of Allowance Example: Fab Co.
STEP 3 – Total Loss Allowance and ECL

	Individual Assessment	Group Assessment	Total
<u>SFP effect</u>			
Accounts Receivable	100,000	500,000	**600,000**
Less Loss Allowance*	(90,000)	(75,900)	**(165,900)**
Accounts Receivable (net)	10,000	424,100	**434,100**
<u>Income Statement effect</u>			
Expected Credit Loss (Scenario 1)	90,000	75,900	**165,900**
Expected Credit Loss (Scenario 2)	90,000	48,900	**138,900**
Expected Credit Loss (Scenario 3)	90,000	88,900	**178,900**

To Statement of Financial Position (SFP)

To Income Statement

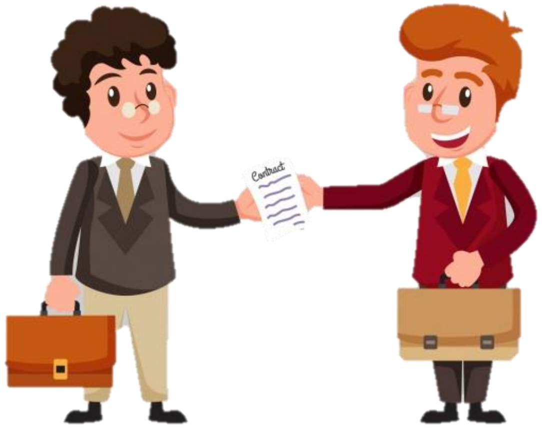
** To simplify illustration, the loss allowance target balance calculated from the aging analysis is for group assessment only. Loss allowance made under the individual assessment is separate.*

Real FS

Let’s take a look at some real companies’ FS and their reporting of Receivables and Allowance for impairment loss.

Notes Receivable

A promissory note is a written promise to pay a specified amount of money, usually with interest, either on demand or at a definite future date.



- Usually interest bearing
- Large amounts
- Longer credit period
- Can arise from:

  (1) **Sales** : similar to AR, but for larger sales with longer credit period

  (2) **Extension of AR** : convert AR into a note with longer credit period

  (3) **Lending to external party** (e.g. supplier, business partner)

Recording Notes Receivable

- Suppose Fab Co. receive a 6-month note of $50,000 at 10% interest rate (annual) on October 1st 2022:
- Journal entries for the note under different scenarios:

(1) For Sales:	Notes Receivable	50,000	
	Sales Revenue		50,000
(2) Conversion from AR:	Notes Receivable	50,000	
	Accounts Receivable		50,000
(3) For Lending:	Notes Receivable	50,000	
	Cash		50,000

Notes Receivable
Recording Interest for Short-term Note

- At Dec 31st 2022, an adjusting entry is needed for Fab Co. to accrue interest income from the note (payment has not been received from the customer).
- The $50,000 note is for 6 months starting Oct 1st 2022 at 10% annual interest rate, therefore the interest income to accrue for the period of 2022 is for 3 months only:

$$\$50,000 \times 10\% \times (3/12) = \$1,250$$

- The adjusting entry at year end is:

Interest receivable	1,250	
Interest Income		1,250

(Note: this computation is only for short-term notes. For long-term notes, we have to take into consideration the time value of money, which will not be covered in this module but in more advanced accounting modules)

Notes Receivable
Recording Collection of Principal + Interest

- On March 31st 2023, Fab Co. collects on the note (principal + interest)
- Fab Co. recognizes interest income for the 3 months of Jan-Mar 2023 : \$50,000 x 10% x (3/12) = \$1,250
- The journal entry to record collection of principal and interest is:

Cash	52,500	
Interest Receivable		1,250
Interest Income		1,250
Note Receivable		50,000

Disposal of Receivables

Companies can convert receivables to cash before they are due.

Selling Receivables

- Selling receivables to a finance company or bank
- Buyer takes ownership of the receivables

Pledging Receivables

- Receivable used as security for loan
- Company (borrower of the loan) still retains ownership of the receivables.

PollEv Quick Quiz

- The link for the PollEv activity in class is:

PollEv.com/bizhann

- Or scan the QR code.

Goals for Today

Concepts

- Accounts Receivables
- Notes Receivables

Accounting Procedures

- Direct write-off method vs Allowance method to account for impairment
- Assessment of impairment under allowance method

Financial Analysis

- Accounts Receivables Turnover
- Average Collection Period

Assessing Efficiency and Liquidity
Accounts Receivables Turnover

Accounts Receivables Turnover

$$\text{Accounts Receivables Turnover} = \frac{\text{Net Sales}}{\text{Average Accounts Receivable}}$$

- Measures how often are receivables received and collected – how many times a year a company converts its average accounts receivables into cash.
- Useful to assess how efficient management has been in granting credit to produce revenue.
- Average accounts receivable (AR) = (Beg AR + End AR) / 2

AR Turnover
An example: ComfortDelGro

SFP

	Note	The Group 2021 $'mil	2020* $'mil
ASSETS			
Current assets			
Short-term deposits and bank balances	4	919.1	742.8
Trade and other receivables	5	536.9	533.4
Due from subsidiaries	6	–	–
Grant receivables	12	0.6	20.1
Inventories	7	116.9	127.9
		1,573.5	1,424.2
Assets classified as held for sale	43	8.3	–
Deferred tax assets	16	6.5	–
Total current assets		1,588.3	1,424.2

IS

	Note	2021 $'mil	2020* $'mil
Revenue	27	3,538.3	3,242.6

ComfortDelGro	2021	2020	2019
Average Trade Receivables	391.4	359.6	297.1
Net Sales	3,538.3	3,242.6	3,901.1
AR Turnover (Net Sales/Avg AR)	**9.04**	**9.02**	**13.13**

Assessing Efficiency and Liquidity
Average Collection Period

Average Collection Period

$$\text{Average Collection Period} = \frac{365}{\text{Accounts receivable turnover}}$$

- Measures how many days on average it takes the company to collect on its accounts receivables and convert it to cash.
- Recall that liquidity refers to how easily an asset can be converted to cash.
- Also known as "Days to Collect AR"
- Useful to assess how efficient a company is in collecting is receivables
- Shorter days is preferred: indicate faster conversion to cash

Average Collection Period
An example: ComfortDelGro

SFP

	Note	The Group 2021 $'mil	2020* $'mil
ASSETS			
Current assets			
Short-term deposits and bank balances	4	919.1	742.8
Trade and other receivables	5	536.9	533.4
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Net Sales	3,538.3	3,242.6	3,901.1
AR Turnover (Net Sales/Avg AR)	**9.04**	**9.02**	**13.13**
Average Collection Period	**40.37**	**40.47**	**27.79**

AR Turnover & Average Collection Period
ComfortDelGro vs Uber

Let's compare ComfortDelGro with its competitor Uber:

ComfortDelGro	2021	2020	2019
Average Trade Receivables	391.4	359.6	297.1
Net Sales	3,538.3	3,242.6	3,901.1
AR Turnover	**9.04**	**9.02**	**13.13**
Average Collection Period	**40.37**	**40.47**	**27.79**

Uber	2021	2020	2019
Average Trade Receivables	1,756	1,143.5	1,066.5
Net Sales	17,455	11,139	13,000
AR Turnover	**9.94**	**9.74**	**12.19**
Average Collection Period	**36.72**	**37.47**	**29.94**

- Uber's average collection period is slightly better than Comfort's in 2021 and 2020.
- In 2019, the average collection period for both companies was within a month but in 2020 and 2021, it went above 30 days. Comfort's even went up to 40 days. Why do you think that is?

Take Away for Lecture 06

- Accounts Receivables
  - IFRS 9: Assess possibility of impairment of AR
- Impairment of AR under the Allowance Method (IFRS 9)
  - Expected Credit Loss (ECL)
  - Estimating Loss Allowance – aging analysis
- Notes Receivable
- FSA:
  - AR Turnover
  - Average Collection Period

"Send him our toughest collection letter, threaten him with legal action, and subliminally suggest some type of bodily harm. But put XOXOXO under my signature to show that we still love him as a customer!"

Looking Forward…

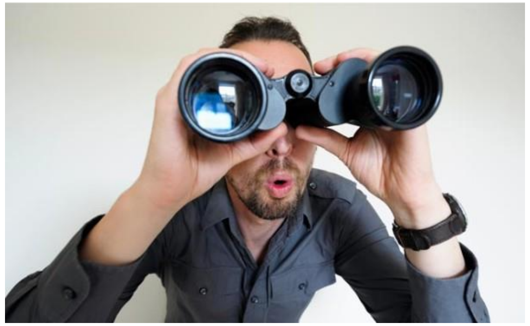
What to expect after recess week

Recess Week Next Week :

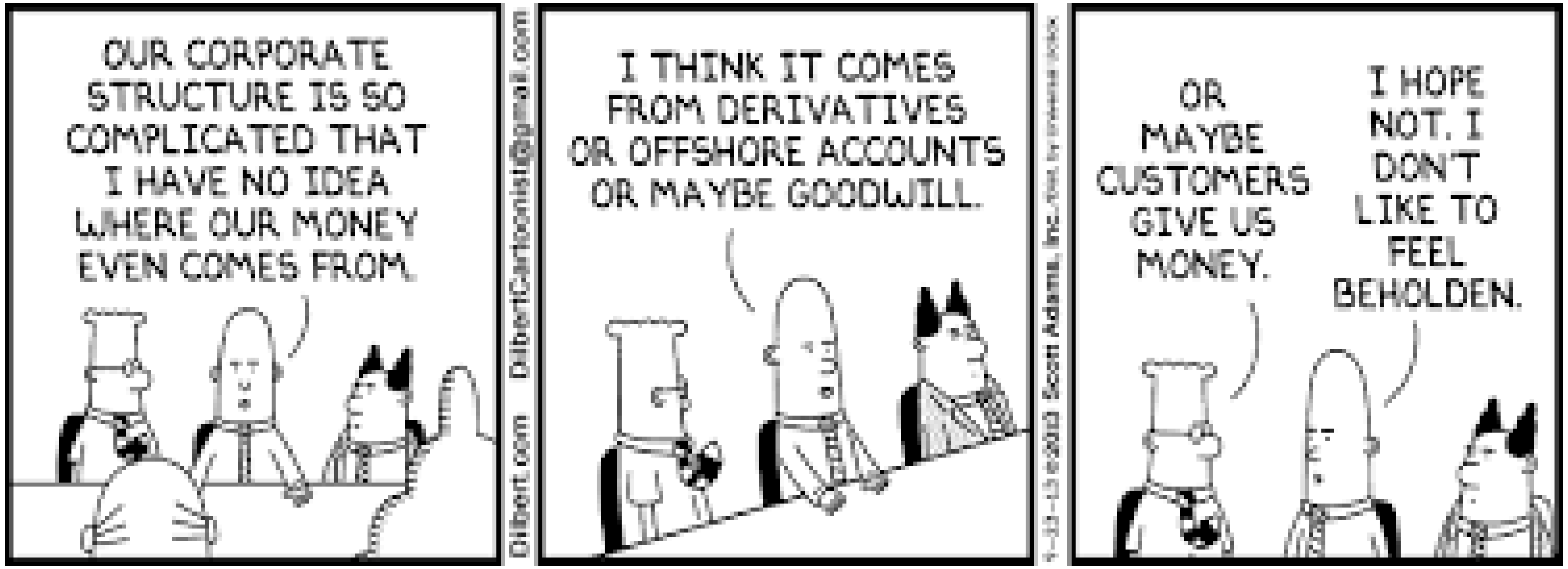
There will be NO lectures & tutorials next week!

After Recess week, we will be covering:

- Lecture 07 : MIDTERM TEST + Chapter 6 – Operating Activities: Cash & Current Liabilities (Pre-recorded lecture)
- Lecture 08 : Chapter 08 – Operating Activities: Inventory
- Lecture 09 : Chapter 10 – Investing Activities: (PPE) Long Term Assets
- Lecture 10 : Chapter 12 – Financing Activities: Equity
- Lecture 11 : Chapter 14 – Statement of Cash Flow
- Lecture 12 : Chapter 15 – Financial Statement Analysis



That’s all for today!



Post your questions on Canvas discussion forum.

My email: hanny.kusnadi@nus.edu.sg