



# Cash and Financial Assets

## - Accounting Principles

2022. 4.

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# Recap the last class

- When the company acquires financial assets,

(recognition journal entry)

Financial assets

XXX

Cash

XXX

- When it sells all the financial assets:

Cash

YYY

Financial assets

XXX

Gains on disposal of FA

YYY - XXX

→ How to report in the end of each accounting period?

(If the company holds the Financial assets more than one year)

Historical value (cost) or market value?

# Recap the last class

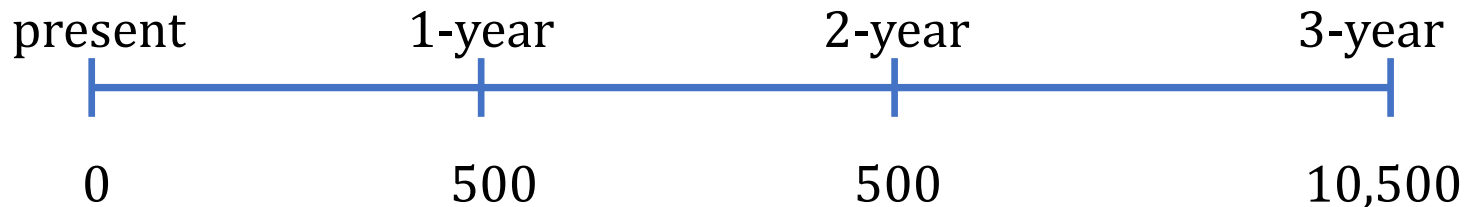
- The \$1 of present has different value from the 1\$ of one year later.

$$\text{Present Value} = \frac{\text{Futuer Value}}{(1+r)^n}$$

r : annual interest rate

n : the number of years

- For example, the company gets \$500 annually for three years, and \$10,000 (principle) three years later.



$$\rightarrow \text{Present value} = \frac{500}{(1+r)^1} + \frac{500}{(1+r)^2} + \frac{500}{(1+r)^3} + \frac{10,000}{(1+r)^3}$$

# Recap the last class

- For example, the company gets \$500 annually for three years, and \$10,000 (principle) three years later.
    - The current annual interest rate is 6%. What is the fair value of this cash flow?
- Present value =  $\frac{500}{(1+0.06)^1} + \frac{500}{(1+0.06)^2} + \frac{500}{(1+0.06)^3} + \frac{10,000}{(1+0.06)^3} = 9,733$

	2022.1.1.	2022.12.	2023.12	2024.12	Sum of three years
Nominal amount	0	500	500	10,500	11,500
Interest rate	0.06				
Discount factor	1	0.943	0.890	0.840	
Present Value	0	472	445	8,816	9,733

# Recap the last class

	Interest Income	Value before the interest payment (A)	Small payback (B)	Value after payment (C=A-B)
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,733 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2022.1.1.

Financial Assets	9,733	Cash	9,733
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2022.12.31.

Financial Assets	84	Interest income	584
Cash	500		

$$9,733 \times 0.06 = 584$$

2023.12.31.

Financial Assets	89	Interest income	589
Cash	500		

$$9,817 \times 0.06 = 589$$

# Recap the last class

	Interest Income	Value before the interest payment (A)	Small payback (B)	Value after payment (C=A-B)
2022.1.1.	-	9,733		9,733
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2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2024.12.31.

Financial Assets  
Cash

94  
500

Interest income 594

$$9,906 * 0.06 = 594$$

Cash

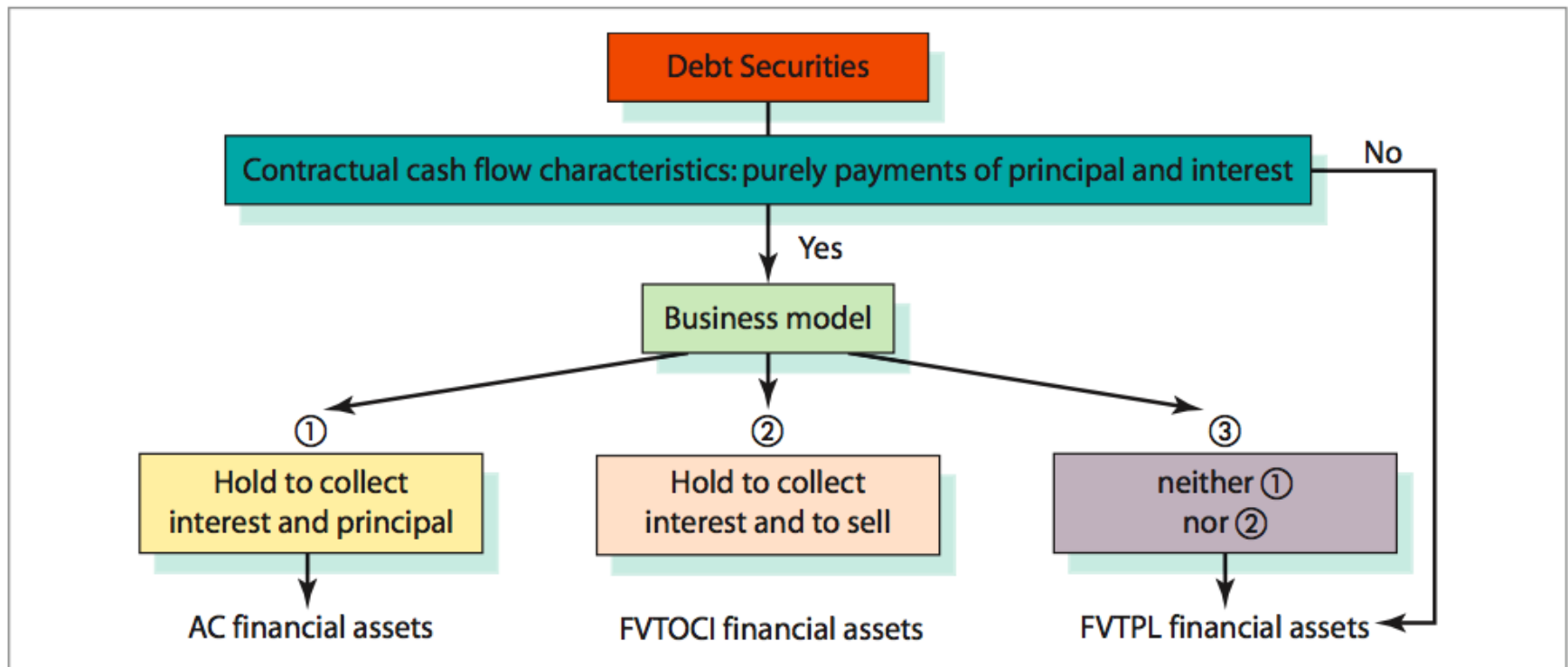
10,000

Financial Assets 10,000

Any Questions?

# Financial Assets – Debt type assets

- Classifications of Debt Securities



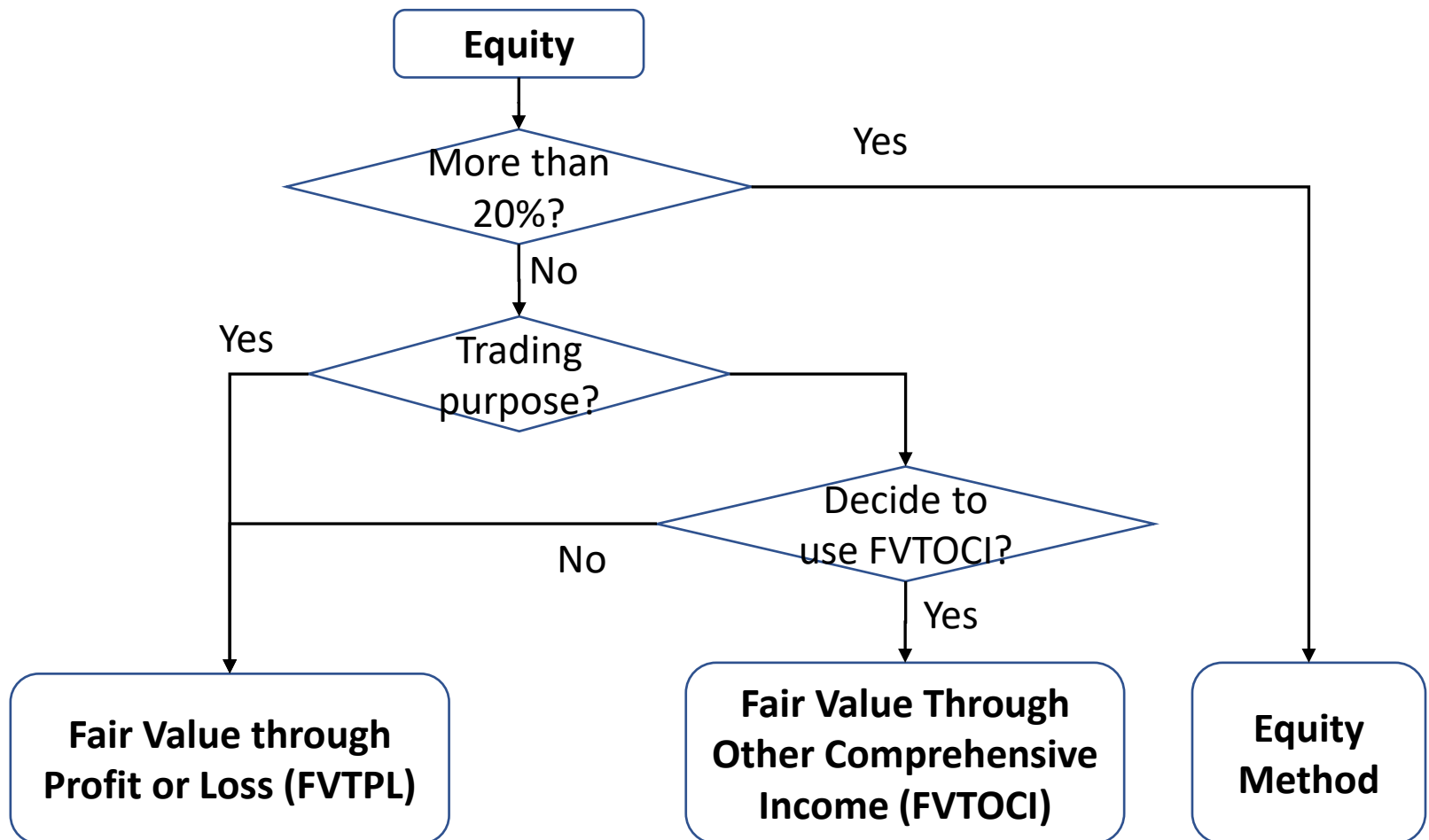


# Financial Assets – Debt type assets

- There are three types of accounting methods for debt type financial assets.
  - 1) **Amortized Cost (AC)** Financial Assets
    - Debt Securities for which the investors **holds** primarily to collect the interest and **principal** are measured at amortized cost
  - 2) **Fair Value Through Other Comprehensive Income (FVTOCI)** Financial Assets
    - Debt Securities that are held **to collect interest** and **to sell before maturity** are measured as fair value
  - 3) **Fair Value through Profit or Loss (FVTPL)** Financial Assets
    - Holding for selling in near future, and other cases

# Financial Assets – Equity Type

- Equity Investment



# Financial Assets – Equity Type

- Equity Investment

- 1) Fair Value Through Other Comprehensive Income (FVTOCI) Financial Assets

- Equity Securities for which the investor holds not for the trading purpose. In addition, the company choose to classify this as FVTOCI

- 2) Fair Value through Profit or Loss (FVTPL) Financial Assets

- Equity Securities that are held for the trading purpose

- 3) Investments in Associates (Using the Equity Method)

- When an investor has significant influence but not control over an investee, the investee is an associate
- Significant influence is presumed with a shareholding of between 20% and 50% of the voting rights.

# Fair Value through Profit or Loss (FVTPL)

- Fair Value through Profit or Loss (FVTPL)
  - Re-evaluating at every period
    - If the price is increased, **the net-income increases.**
    - If the price decreases, the net-income decreases.

## 2) Example

Stock Price of Company ABC (USD/stock)

20x0.1.7.	20x0.12.31.	20x1.12.31	20x2.12.31.
\$400	\$450	\$510	\$350

We bought *two stocks* on 20x0.1.7., and we hold it until 20x2.12.31.

20x0.1.7.

FVTPL (Financial assets)	\$800	Cash (assets)	\$800
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20x0.12.31.

FVTPL (assets)	\$100	Gain on valuation of FVTPL (gain)	\$100
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20x1.12.31.

FVTPL (assets)	\$120	Gain on valuation of FVTPL	\$120
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20x2.12.31.

Loss on valuation of FVTPL (gain)	\$320	FVTPL	\$320
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# Fair Value Through Other Comprehensive Income (FVTOCI)

- Fair Value through Profit or Loss (FVTOCI)
  - Re-evaluating at every period.
    - If the price is increased, there is **no change in net-income**.
    - If the price is increased, the total equity increases.

## 2) Example

Stock Price of Company ABC (USD/stock)

20x0.1.7.	20x0.12.31.	20x1.12.31	20x2.12.31.
\$400	\$450	\$510	\$350

We bought two stocks on 20x0.1.7., and the company to choose to use FVTOCI.

20x0.1.7.		
FVTPL (Financial assets)	\$800	Cash \$800
20x0.12.31.		
FVTPL	\$100	Unrealized Gains of FVTOCI (equity) \$100
20x1.12.31.		
FVTPL	\$120	Unrealized Gains of FVTOCI (equity) \$120

# FVTPL vs. FVTOCI

- The asset sides and total equity are the same.
  - The net-incomes are different.

Stock Price of Company ABC (USD/stock)

20x0.1.7.	20x0.12.31.	20x1.12.31	20x2.12.31.
\$400	\$450	\$510	\$350

20x0.1.1.

Statement of Financial Position			
Cash	1000	Liability	0
		Capital Stock	800
		Retained Earning	200
Total asse	1000	Total L and E	1000

20x0.12.31. FVTPL

Income Statement	
Gain on valuation of financial assets	100
Net-Income	100

Statement of Financial Position			
Cash	200	Liability	0
FVTPL	900	Capital Stock	800
		Retained Earning	300
Total asse	1100	Total L and E	1100

20x1.12.31. FVTPL

Income Statement	
Gain on valuation of financial assets	120
Net-Income	120

Statement of Financial Position			
Cash	200	Liability	0
FVTPL	1020	Capital Stock	800
		Retained Earning	420
Total asse	1220	Total L and E	1220

# FVTPL vs. FVTOCI

- The asset sides and total equity are the same.
- The net-incomes are different.

Stock Price of Company ABC (USD/stock)

20x0.1.7.	20x0.12.31.	20x1.12.31	20x2.12.31.
\$400	\$450	\$510	\$350

20x0.1.1.

Statement of Financial Position			
Cash	1000	Liability	0
		Capital Stock	800
		Retained Earning	200
Total asse	1000	Total L and E	1000

20x0.12.31. FVTOCI

Income Statement	
Gain on valuation of financial assets	0
Net-Income	0

Statement of Financial Position			
Cash	200	Liability	0
FVTOCI	900	Capital Stock	800
		Retained Earning	200
		Unrealized Gains of FVTOCI	100
		Total equity	1100
Total asse	1100	Total L and E	1100

20x1.12.31. FVTOCI

Income Statement	
Gain on valuation of financial assets	0
Net-Income	0

Statement of Financial Position			
Cash	200	Liability	0
FVTOCI	1020	Capital Stock	800
		Retained Earning	200
		Unrealized Gains of FVTOCI	220
		Total equity	1220
Total asse	1220	Total L and E	1220

# FVTOCI – Debt Type Financial Assets

	Interest Income	Value before the interest payment (A)	Small payback (B)	Value after payment (C=A-B)
2022.1.1.	-	9,733		9,733
2022.12.31.	584 (=9,773 * 6%)	10,317 (=9733*1.06)	500	9,817
2023.12.31.	589 (=9,817 * 6%)	10,406 (=9817*1.06)	500	9,906
2024.12.31.	594 (=9,906 * 6%)	10,500 (=9906*1.06)	500	10,000

2022.1.1.

FVTOCI (asset)	9,733	Cash	9,733
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2022.12.31.

FVTOCI (asset)	84	Interest income (gain)	584
Cash (asset)	500		

$$9,733 * 0.06 = 584$$

If the value of this bond is 9,900 on 2022.12.31, what is a journal entry for this FVTOCI financial asset.  
2022.12.31.

FVTOCI (asset)	83	Unrealized Gains of FVTOCI (equity)	83
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What is the book value of FVTOCI on 2022.12.31.?



# Equity Method – Equity Type Financial Asset

- Equity Method

1) When you acquire more than 20% of shares, you need to use equity method.

- Gain from the shares is calculated by using the net-income and the ratio of your ownership.

2) Example

- Your company bought the 25% of ABC company's total stocks on 2020.2.7. (paying \$10,000 of cash), and the net-income of ABC in the year 2020 is \$2,000.

2020.2.7.

Equity method stock (assets)	\$10,000	Cash	\$10,000
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2020.12.31.

Equity method stock (assets)	\$500	Gain on equity method stock (gain)	\$500
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$\$2,000 * 25\% = 500$

2021.3.20. The ABC company give us \$ 350 dividend as cash

2021.3.20.

Cash	\$350	Equity method stock (assets)	\$350
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Any Questions?

# Consolidated Financial Statements

- This topic is advance accounting.
  - We need consolidated financial statements when one company owns another company.
  - For example, XYZ Company owns 80% of ABC Company.

20x0.12.31.

Company ABC			
Statement of Financial Position			
Cash	300	Bank loan from Shinhan	2,000
Inventory B	500		
Land R	2,000	Capital Stock	500
		Retained Earning	300
		Total equity	800
Total assets	2,800	Total Liability and Equity	2,800

20x0.12.31.

20x0.12.31.

Company XYZ			
Statement of Financial Position			
Cash	200	Bank loan from KB	640
Inventory A	800		
Investment ABC	640	Capital Stock	5,000
Land Q	5,000	Retained Earning	1,000
		Total equity	6,000
Total assets	6,640	Total Liability and Equity	6,640

Company XYZ (Consolidated)			
Statement of Financial Position			
Cash	500	Bank loan from KB	640
Inventory A	800	Bank loan from Shinhan	2,000
Inventory B	500	Total liability	2,640
Land Q	5,000	Capital Stock	5,000
Land R	2,000	Retained Earning	1,000
		Minority interest	160
		Total equity	6,160
Total assets	8,800	Total Liability and Equity	8,800

# Consolidated Financial Statements

- This topic is advance accounting.
  - We need consolidated financial statements when one company owns another company.
  - For example, XYZ Company owns 80% of ABC Company.

20x1.1.1. ~ 20x1.12.31.

Company ABC	
Income Statement	
Sales Revenue	800
Cost of Goods	500
Net-Income	300

20x1.1.1. ~ 20x1.12.31.

Company XYZ	
Income Statement	
Sales Revenue	1500
Cost of Goods	1200
Gain on investment ABC	240
Net-Income	540

20x1.1.1. ~ 20x1.12.31.

Company XYZ	
Income Statement (Consolidated)	
Sales Revenue	2300
Cost of Goods	1700
Net-Income	600
Owners of the Company	540
Non-controlling interests	60

# Consolidated Financial Statements

20x0.12.31.

Company ABC  
Statement of Financial Position

Cash	300	Bank loan from Shinhan	2,000
Inventory B	500		
Land R	2,000	Capital Stock	500
		Retained Earning	300
		Total equity	800
Total assets	2,800	Total Liability and Equity	2,800

20x1.1.1. ~ 20x1.12.31.

Company ABC  
Income Statement

Sales Revenue	800
Cost of Goods	500
Net-Income	300

20x1.12.31.

Company ABC  
Statement of Financial Position

Cash	400	Bank loan from Shinhan	2,000
Inventory B	800	Account Payable	100
Land R	2,000	Capital Stock	500
		Retained Earning	600
		Total equity	1,100
Total assets	3,200	Total Liability and Equity	3,200

Company XYZ  
Statement of Financial Position

Cash	200	Bank loan from KB	640
Inventory A	800		
Investment ABC	640	Capital Stock	5,000
Land Q	5,000	Retained Earning	1,000
		Total equity	6,000
Total assets	6,640	Total Liability and Equity	6,640

Company XYZ  
Income Statement

Sales Revenue	1500
Cost of Goods	1200
Gain on investment ABC	240
Net-Income	540

Company XYZ  
Statement of Financial Position

Cash	300	Bank loan from KB	640
Inventory A	1,000		
Investment AI	880	Capital Stock	5,000
Land Q	5,000	Retained Earning	1,540
		Total equity	6,540
Total assets	7,180	Total Liability and Equity	7,180

Company XYZ (Consolidated)  
Statement of Financial Position

Cash	500	Bank loan from KB	640
Inventory A	800	Bank loan from Shinhan	2,000
Inventory B	500	Total liability	2,640
Land Q	5,000	Capital Stock	5,000
Land R	2,000	Retained Earning	1,000
		Minority interest	160
		Total equity	6,160
Total assets	8,800	Total Liability and Equity	8,800

Company XYZ

Income Statement (Consolidated)

Sales Revenue	2300
Cost of Goods	1700
Net-Income	600
Owners of the Company	540
Non-controlling interests	60

Company XYZ (Consolidated)  
Statement of Financial Position

Cash	700	Bank loan from KB	640
Inventory A	1,000	Bank loan from Shinhan	2,000
Inventory B	800	Account Payable	100
Land Q	5,000	Total liability	2,740
Land R	2,000	Capital Stock	5,000
		Retained Earning	1,540
		Minority interest	220
		Total equity	6,760
Total assets	9,500	Total Liability and Equity	9,500

Any Questions?