



# Cash and Financial Assets

## - Accounting Principles

2022. 4.

Dr. Yangin Yoon

# Recap the last class

- When they buy goods:

Inventory	\$5,000	Cash	\$5,000
-----------	---------	------	---------

- When they sell all the goods:

Cash	\$8,000	Revenue	\$8,000
------	---------	---------	---------

Cost of goods	\$5,000	Inventory	\$5,000
---------------	---------	-----------	---------

→ What if they sell just half of the goods?

What if they bought goods multiple times?

# Recap the last class

---

- Accounting for Merchandising Firms
  - Inventory valuation
- First-in, first out (FIFO)
- Last-in, first-out (LIFO)
- Weighted-Average Cost

# Recap the last class

- IAS 2 (Inventories)

- Paragraph 23

23. The cost of inventories of items that are not ordinarily interchangeable and goods or services produced and segregated for specific projects shall be assigned by using specific identification of their individual costs.

- K-IFRS 1002 Inventory

23. 통상적으로 상호 교환될 수 없는 재고자산항목의 원가와 특정 프로젝트별로 생산되고 분리되는 재화 또는 용역의 원가는 개별법을 사용하여 결정한다.

# Recap the last class

- IAS 2 (Inventories)

- Paragraph 24

24. Specific identification of cost means that specific costs are attributed to identified items of inventory. This is the appropriate treatment for items that are segregated for a specific project, regardless of whether they have been bought or produced. However, specific identification of costs is **inappropriate when there are large numbers of items of inventory that are ordinarily interchangeable**. In such circumstances, the method of selecting those items that remain in inventories could be used to obtain predetermined effects on profit or loss.

Any Questions?

# Cash and Internal Control

- Cash

- Cash is essential in operating business
- Cash should be monitored carefully

(For example, which items should be monitored more carefully?

Cash, diamond, building, large machinery, land, bolts and nuts?)

- Internal control

- Segregation of duties
- Inventory management, sales activity, receivable collection, accounting department

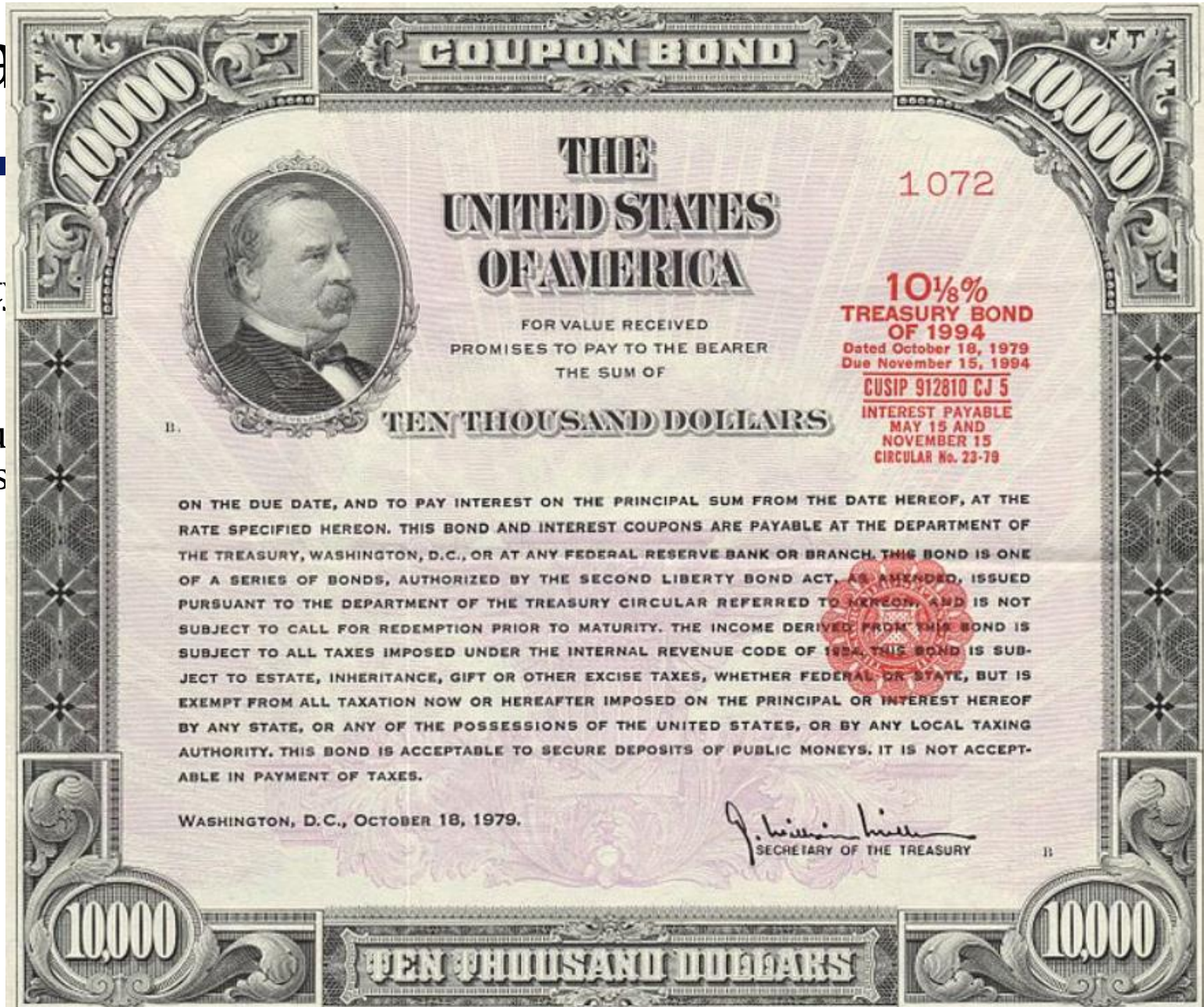
# Financial Asset

- Financial Asset
  - IAS 32 Paragraph 11
  - A financial asset is any asset that is:
    - (a) cash;
    - (b) an equity instrument of another entity;
    - (c) a contractual right:
    - (d) a contract that will or may be settled in the entity's own equity instruments with some condition(s)
- Common example
  - Investing stocks or bonds
  - IAS 28 is also related.



# Financial

- Stock
  - Equity
- Bond
  - Futures



# Financial Asset

- 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

or

Cash	YYY	Financial assets	XXX
Loss on disposal of FA	XXX - YYY		

# Financial Asset

- 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?

# Time Value of Money

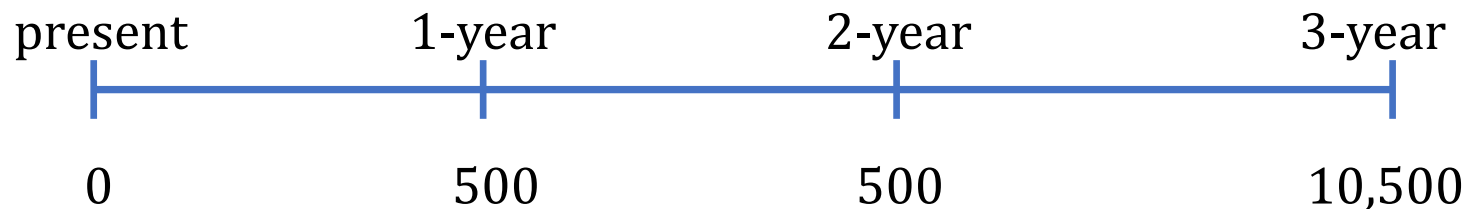
- The \$1 of present has different value from the 1\$ of one year later.

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

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.



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

# Time Value of Money

- 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

# Time Value of Money

- For example, the company gets \$500 annually for three years, and \$10,000 (principle) three years later.
  - The current annual interest rate is 6%. The fair value of this cash flow is \$9,733

	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.	10,317 (=9733*1.06)	500	9,817
2023.12.31.	10,406 (=9817*1.06)	500	9,906
2024.12.31.	10,500 (=9906*1.06)	500	10,000

$$\text{The value of cash flow at 2024.1.1.} = \frac{500}{(1+r)^1} + \frac{10,000}{(1+r)^1} = 9,906$$

# Time Value of Money

	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.	10,317 (=9733*1.06)	500	9,817
2023.12.31.	10,406 (=9817*1.06)	500	9,906
2024.12.31.	10,500 (=9906*1.06)	500	10,000

2022.1.1.

Financial Assets	9,733	Cash	9,733
------------------	-------	------	-------

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		

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



# Time Value of Money

	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.	10,317 (=9733*1.06)	500	9,817
2023.12.31.	10,406 (=9817*1.06)	500	9,906
2024.12.31.	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



# Time Value of Money - Summary

2022.1.1.

Financial Assets	9,733	Cash	9,733
------------------	-------	------	-------

2022.12.31.

Financial Assets	84	Interest income	584
Cash	500		

2023.12.31.

Financial Assets	89	Interest income	589
Cash	500		

2024.12.31.

Financial Assets	94	Interest income	594
Cash	500		

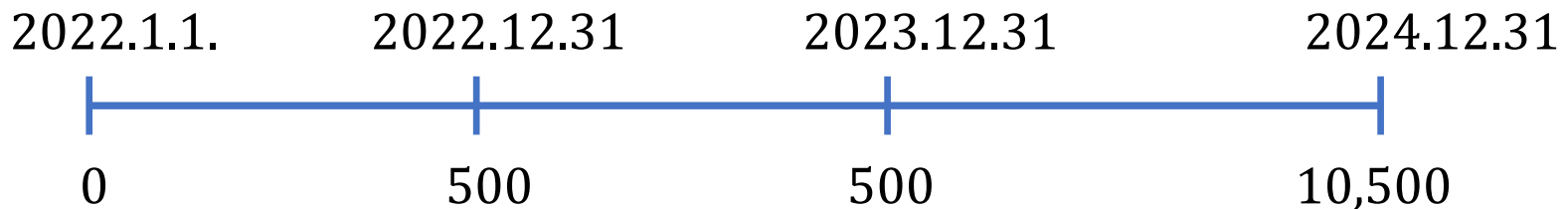
Cash	10,000	Financial Assets	10,000
------	--------	------------------	--------

→ Financial Assets =  $9,733 + 84 + 89 + 94 = 10,000$

Total interest income for three years =  $584 + 589 + 594 = 1,767 = 500 \cdot 3 + (10,000 - 9,733)$

# Re-valuation

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



→ Present value (2022.1.1.) =  $\frac{500}{(1+r)^1} + \frac{500}{(1+r)^2} + \frac{500}{(1+r)^3} + \frac{10,000}{(1+r)^3}$

- 2024.1.1. The annual interest income is 3%. What is the value of the remaining cash flows?

The value of cash flow at 2024.1.1. =  $\frac{500}{(1+0.03)^1} + \frac{10,000}{(1+0.03)^1} = 10,194$

# Re-valuation

2022.1.1.

Financial Assets	9,733	Cash	9,733
------------------	-------	------	-------

2022.12.31.

Financial Assets	84	Interest income	584
Cash	500		

2023.12.31.

Financial Assets	89	Interest income	589
Cash	500		

2024.1.1.

Financial Assets	288	Gain	288
------------------	-----	------	-----

$$10194 - (9733 + 84 + 89) = 288$$

→ What is the book value of Financial Assets on 2024.1.1.?

$$9,733 + 84 + 89 + 288 = 10194$$

# Re-valuation

2024.1.1.

Financial Assets	288	Gain	288
------------------	-----	------	-----

$$10194 - (9733 + 84 + 89) = 288$$

→ What if the company holds this bond until the maturity, what is the journal entry?

2024.12.31.

Financial Assets	306	Interest Income	288
------------------	-----	-----------------	-----

$$10194 * 0.03 = 306$$

Cash	10500	Financial Assets	10500
------	-------	------------------	-------

# Re-valuation & Disposal

2022.1.1.

Financial Assets	9,733	Cash	9,733
------------------	-------	------	-------

2022.12.31.

Financial Assets	84	Interest income	584
Cash	500		

2023.12.31.

Financial Assets	89	Interest income	589
Cash	500		

2024.1.1.

Financial Assets	288	Gain	288
------------------	-----	------	-----

→ What if the company sell this bond with \$10,300 on 2024.1.2.?

Cash	10,300	Financial Assets (FA)	10,194
		Gain on disposal of FA	106

# 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

# Equity Investment

- 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.

# Financial Assets & Equity Investment

---

- We will study more in the next class



Any Questions?

# Trial Balance

- Sample of Trial Balance

J. J. Inc. Trial Balance December 31, 2017			Units: NT dollars
	Debits	Credits	
Cash .....	\$233,365		
Accounts Receivable .....	16,925		
Supplies on Hand .....	7,845		
Prepaid Rent .....	27,000		
Prepaid Insurance .....	3,120		
Land .....	341,180		
Accounts Payable .....		\$14,145	
Interest Payable .....		795	
Unearned Rent Revenue .....		132,000	
Notes Payable .....		97,620	
Capital Stock .....		126,600	
Accumulated Other Comprehensive Income .....		34,130	
Retained Earnings .....		208,390	
Service Revenue .....		119,280	
Wages Expense .....	91,250		
Rent Expense .....			
Utilities Expense .....	4,750		
Insurance Expense .....	930		
Supplies Expenses .....	6,595		
Income Tax Expense .....			
	<u>\$ 732,960</u>	<u>\$ 732,960</u>	

# Income Statement

- Sample of Income Statement

<b>J. J. Inc.</b> <b>Statement of Comprehensive Income</b> <b>For the Year Ended December 31, 2017</b>			<b>Units: NT dollars</b>
Operating revenues:			
Service revenue . . . . .	\$119,280		
Rent revenue . . . . .	<u>44,000</u>		\$163,280
Operating expenses:			
Wages expense . . . . .	98,750		
Rent expense . . . . .	6,750		
Utilities expense . . . . .	4,985		
Insurance expense . . . . .	2,490		
Supplies expense . . . . .	<u>8,545</u>		(121,520)
Income before income tax . . . . .			41,760
Income tax expense . . . . .			<u>(2,088)</u>
Net income . . . . .			\$ 39,672
Other comprehensive income . . . . .			0
Comprehensive income . . . . .			<u><u>\$ 39,672</u></u>

# Income Statement

- Sample of Income Statement

<b>High Speed Company</b> <b>Statement of Comprehensive Income</b> <b>For the Years Ended December 31, 2017 and 2016</b> <b>(Amounts in Thousands of New Taiwan Dollars)</b>		
	<b>2017</b>	<b>2016</b>
Service revenue . . . . .	\$2,048	\$1,861
Operating and administrative expense . . . . .	(1,694)	(1,503)
Operating profit . . . . .	<u>\$ 354</u>	<u>\$ 358</u>
Interest expense . . . . .	(100)	(125)
Non-operating income and expense . . . . .	10	(5)
Income before income tax . . . . .	<u>264</u>	<u>228</u>
Income tax expense . . . . .	(7)	(15)
Net income . . . . .	<u>\$ 257</u>	<u>\$ 213</u>
Other comprehensive income (loss) for the period . . . . .	0	0
Total comprehensive income for the period . . . . .	<u><u>\$ 257</u></u>	<u><u>\$ 213</u></u>
Earnings per share	\$1.22	\$1.01

# Income Statement

- Sample of Income Statement

Apple Inc.			
<b>CONSOLIDATED STATEMENTS OF OPERATIONS</b>			
(In millions, except number of shares which are reflected in thousands and per share amounts)			
	Years ended		
	September 30, 2017	September 24, 2016	September 26, 2015
Net sales	\$ 229,234	\$ 215,639	\$ 233,715
Cost of sales	141,048	131,376	140,089
Gross margin	88,186	84,263	93,626
Operating expenses:			
Research and development	11,581	10,045	8,067
Selling, general and administrative	15,261	14,194	14,329
Total operating expenses	26,842	24,239	22,396
Operating income	61,344	60,024	71,230
Other income/(expense), net	2,745	1,348	1,285
Income before provision for income taxes	64,089	61,372	72,515
Provision for income taxes	15,738	15,685	19,121
Net income	\$ 48,351	\$ 45,687	\$ 53,394

# Balance Sheet (Statement of Financial Position)

- Sample of Balance Sheet

High Speed Company Balance Sheet December 31, 2017 and 2016 (Amounts in Thousands of New Taiwan Dollars)		
	2017	2016
<b>ASSETS</b>		
CURRENT ASSETS:		
Cash and equivalents .....	\$2,411	\$2,472
Receivables .....	317	138
Supplies .....	830	841
Prepaid expenses and other current assets .....	260	791
Total current assets .....	<u>\$3,818</u>	<u>\$4,242</u>
NON-CURRENT ASSETS:		
Property, plant, and equipment:		
Land .....	\$ 500	\$ 422
Plant and equipment .....	5,837	5,652
Less: Accumulated depreciation .....	(915)	(604)
Total property, plant, and equipment, net .....	<u>\$5,422</u>	<u>\$5,470</u>
<b>TOTAL ASSETS .....</b>	<b><u>\$9,240</u></b>	<b><u>\$9,712</u></b>

# Balance Sheet (Statement of Financial Position)

- Sample of Balance Sheet

LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Short-term loans .....	\$ 715	\$ 927
Accounts payable .....	490	530
Salary payable .....	535	148
Income tax payable .....	636	656
Other accrued liabilities .....	315	849
Total current liabilities .....	<u>\$2,691</u>	<u>\$3,110</u>
NON-CURRENT LIABILITIES:		
Bonds payable .....	\$1,000	\$1,000
Long-term bank loans .....	1,359	1,587
Other liabilities .....	699	671
Total non-current liabilities .....	<u>\$3,058</u>	<u>\$3,258</u>
Total liabilities .....	<u>\$5,749</u>	<u>\$6,368</u>
EQUITY:		
Capital stock: par value \$10 per share; 300,000 shares authorized; 210,000 shares outstanding .....	\$2,100	\$2,100
Retained earnings .....	611	464
Other equity .....	780	780
Total equity .....	<u>\$3,491</u>	<u>\$3,344</u>
TOTAL LIABILITIES and EQUITY .....	<u>\$9,240</u>	<u>\$9,712</u>

# Reading Material

- Why global accounting standards?

<https://www.ifrs.org/use-around-the-world/why-global-accounting-standards/>

- GAAP VS. IFRS: WHAT ARE THE KEY DIFFERENCES AND WHICH SHOULD YOU USE?

<https://online.hbs.edu/blog/post/gaap-vs-ifrs>

- GAAP: What Are ‘Generally Accepted Accounting Principles’?

<https://www.nerdwallet.com/article/small-business/gaap-generally-accepted-accounting-principles>

- What Are the Advantages and Disadvantages of Accrual Basis Accounting?

<https://smallbusiness.chron.com/sole-proprietorship-business-handle-money-58370.html>

<https://connectusfund.org/6-advantages-and-disadvantages-of-accrual-basis-accounting>

<https://kapa21.or.kr/bbs/dictionary/6766>



Any Questions?