



Inventories

- Accounting Principles

2022. 5.

Yangin Yoon

Recap the previous class

- First-in, first out (FIFO)
 - First purchase amount is the first cost assigned to cost of goods sold
 - Ending inventory is based on the latest purchase amounts
- Last-in, first-out (LIFO)
 - Costing is the opposite of FIFO
 - Last purchase amount goes immediately to cost of goods sold
 - Ending inventory is based on the oldest purchase amount
- Weighted-Average Cost
 - Based on the average unit amount of inventory during the period

Recap the previous class

- The ABC OIL started its business on 20X2. 1.10.
This is a gasoline station, and it sells only one type of gasoline.
It has bought gasoline from its suppliers. The company use **FIFO methods**.

Date	Amounts (liters)	Unit price (\$/liter)	Total Value
20X2. 1. 15.	100	20	2,000
20X2. 1. 25.	300	15	4,500
20X2. 2. 20.	500	18	9,000
20X2. 3. 25.	400	16	6,400

- 20X2. 2. 1. the shop sold 350 liters. How much is the cost of goods?
 $100 * 20$
 $+ 250 * 15 = 2000 + 3750 = \underline{5,750}$
- 20X2. 3. 26. the shop sold 600 liters. How much is the cost of goods?
 $50 * 15$
 $+ 500 * 18$
 $+ 50 * 16 = 750 + 9000 + 800 = 10050 \checkmark$

Recap the previous class

- The ABC OIL started its business on 20X2. 1.10.
This is a gasoline station, and it sells only one type of gasoline.
It has bought gasoline from its suppliers. The company use **FIFO methods**.

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20X2. 1. 15.	100	20	2,000
20X2. 1. 25.	300	15	4,500
20X2. 2. 20.	500	18	9,000
20X2. 3. 25.	400	16	6,400

- 20X2. 2. 1. the shop sold 350 liters. How much is the cost of goods?

Cash	XXX	Revenue	XXXX
Cost of goods	5,750 ✓	Inventory	5,750

- 20X2. 3. 26. the shop sold 600 liters. How much is the cost of goods?

Cash	XXX	Revenue	XXXX
Cost of goods	10,050 ✓	Inventory	10,050

Measurement of Inventories

- IFRS Standard
 - IAS 2 Inventories - Eng
 - This is equivalent to “기업회계기준서(K-IFRS) 제1002호 재고자산.”
- Paragraph 9
 - Inventories shall be measured at the lower of ^①cost and ^②net realisable value.
- Paragraph 10
 - The cost of inventories shall **comprise all costs of purchase, costs of conversion and other costs** incurred in bringing the inventories to their present location and condition.

Measurement of Inventories

- ABC OIL bought gasoline from its supplier. ABC OIL paid \$100 to its supplier. In addition, ABC OIL paid \$10 to a delivery company for oil transportation. All transactions occurred with cash.

- Provide the journal entry. *value*

- Paragraph 10 – “The cost of inventories shall **comprise all costs of purchase, costs of conversion and other costs** incurred in bringing the inventories to their present location and condition.”

- Journal Entry

Inventory	\$100	Cash	\$100
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Transportation expense	\$10	Cash	\$10
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Inventory	\$10	Transportation expense	\$10
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→

Inventory	\$110	Cash	\$100
		Cash	\$10

Measurement of Inventories

1st 2nd
 -40 120
 80

- ST Toy bought raw material from its supplier. ST Toy paid \$200 to its supplier. In addition, ST Toy paid \$80 to the factory workers as wage. The accounting department employees of ST Toy were also paid \$40. ST Toy manufactured toys and used up all of its raw material. All transactions occurred with cash.

- Paragraph 10 – “The cost of inventories shall **comprise all costs of purchase, costs of conversion and other costs** incurred in bringing the inventories to their present location and condition.”

- Journal Entry

Raw material (asset)	\$200	Cash	\$200
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Factory worker salary expense	\$80	Cash	\$80
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Acct worker salary expense	\$40	Cash	\$40
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Product (asset, inventory)	\$200	Raw material (asset)	\$200
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Product (asset, inventory)	\$80	Factory worker salary expense	\$80
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400
 280 120

Measurement of Inventories

- ST Toy bought raw material from its supplier. ST Toy paid \$200 to its supplier. In addition, ST Toy paid \$80 to the factory workers as wage. The accounting department employees of ST Toy were also paid \$40. ST Toy manufactured toys and used up all of its raw material. All transactions occurred with cash.
- The toys can be sold \$500 in the market.
 - Provide the general entry.
- Paragraph 9 – “Inventories shall be measured at the lower of cost and net realisable value.”
- Journal Entry
 - No additional journal entry is needed.

⇒ product \$280
\$280 \$500

Measurement of Inventories

- ST Toy bought raw material from its supplier. ST Toy paid \$200 to its supplier. In addition, ST Toy paid \$80 to the factory workers as wage. The accounting department employees of ST Toy were also paid \$40. ST Toy manufactured toys and used up all of its raw material. All transactions occurred with cash.
- The toys can be sold \$100 in the market.
 - Provide the general entry.
- Paragraph 10 – “Inventories shall be measured at the lower of cost and net realisable value.”
- Journal Entry

\$ 280
into \$100
280
100

Inventory write-down (expense)	\$180	Product (asset)	<u>\$180</u>
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Measurement of Inventories

- ST Toy bought raw material from its supplier. ST Toy paid \$200 to its supplier. In addition, ST Toy paid \$80 to the factory workers as wage. The accounting department employees of ST Toy were also paid \$40. ST Toy manufactured toys and used up all of its raw material. All transactions occurred with cash.

- The toys can be sold \$100 in the market.

- Provide the general entry.

- Paragraph 10 – “Inventories shall be measured at the lower of cost and net realisable value.”

(K-GAAP 7 – Paragraph 7.20)

- Journal Entry

Inventory write-down (expense)	\$180	Accumulated loss (asset)	\$180
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$$\begin{array}{r} \$200 \\ \$100 \\ \hline 100 \end{array}$$

Inventories (exercise)

- Self-Study Material (in the e-class, Chapter #7)

E 7-6

LO 2



Cost of Goods Sold Calculations

Complete the Cost of Goods Sold section for the statements of comprehensive income of the following five companies:

	Able Company	Baker Company	Carter Company	Delmont Company	Eureka Company
Beginning inventory	£32,000	£49,600	_____	_____	€ 38,400
Purchases	53,000	_____	€ 86,000	€179,000	_____
Purchase returns	_____	£ 2,000	€ 3,600	€ 400	€ 4,400
Cost of goods available for sale	84,200	_____	116,600	_____	163,000
Ending inventory	_____	44,400	30,400	57,600	_____
Cost of goods sold	66,800	134,400	_____	186,800	136,800

Inventories (exercise)

- Self-Study Material (in the e-class, Chapter #7)

E 7-8

LO 2

LO 3

Computing Inventory and Cost of Goods Sold

Witson Boards sells snowboard. Its product, Eagle snowboard is popular among snowboard enthusiasts. Information relating to Witson's purchases of Eagle snowboards during September is shown below. Witson sold 242 Eagle snowboards in September. Witson uses a periodic inventory system.

Date	Explanation	Units	Unit Cost	Total Cost
Sept. 1	Inventory	46	€1,067	€ 49,082
Sept. 12	Purchases	90	1,122	100,980
Sept. 19	Purchases	40	1,144	45,760
Sept. 26	Purchases	88	1,155	101,640
	Totals	<u>264</u>		<u>€297,462</u>

1. Compute the ending inventory at September 30 and cost of goods sold using the FIFO and weighted average cost formulas.
2. For both FIFO and weighted average cost formulas, calculate the sum of ending inventory and cost of goods sold. What do you reveal from the answers you gave for each method?

Any Questions?



Receivable and Payable

- Accounting Principles

2022. 5.

Yangin Yoon

Receivable

- Receivable
 - One type of assets
 - Claims for money, goods, or services
- Accounts Receivable
 - A current asset representing money due for services performed or merchandise sold on credit.
- Notes Receivable
 - A contract in the form of a note received by a company and written by its customer as a result of the company's selling goods or providing services to the customer on credit.

Receivable

- Notes or Checks

John Doe
1234 5th Street
Hometown, USA 123456

Date check is written or date on which you'd like the check cashed **101**

DATE **July 4, 2017**

Check amount (numerical) **101**

Recipient name (individual or organization)

PAY TO THE ORDER OF **Fifty**

Reason for payment

MEMO **L**

3232

NO. 10758813

파가 10758813

발행일 1999년 12월 15일

지급일 2001년 1월 10일

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금일청구권상실사유없음

위의 금액을 귀하 또는 귀하의 지시인에게 이 약속어음과 상환하여 지급하겠습니다.

지급기일 貳千貳年 八月 拾貳日 (08/12)

발행일 2005년 12월 15일

지급지

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10758813 04 8017102 0556 06

Receivable

- Example

- 2022.4.30.

ABC Company sold goods to XYZ Company for \$500. ABC Company accepted a 90-day, 7% note for this transaction from XYZ Company.

+ 90 days

- 2022.7.29.

ABC Company received cash of \$508.63 for the exchange of the note that it received in April.

$$500 \times 0.07 \times \frac{90}{365}$$

- Journal Entry

2022.4.30.

Note receivable	\$500	Revenue	\$500
Cost of Goods	XXX	Inventory	XXX

2022.7.29.

Cash	\$508.63	Note receivable	\$500.00
		Interest Income	\$8.63

* "Interest Income" is a revenue type account.

Evaluation of Receivable

- We evaluate the value of receivable periodically.
 - If a customer is broken, or in trouble, we may not receive the promised amount of money from the customer. If so, we need to include this information in the financial statements.

Bad Debt Expense	XXX	"Allowance for Bad Debts"	XXX
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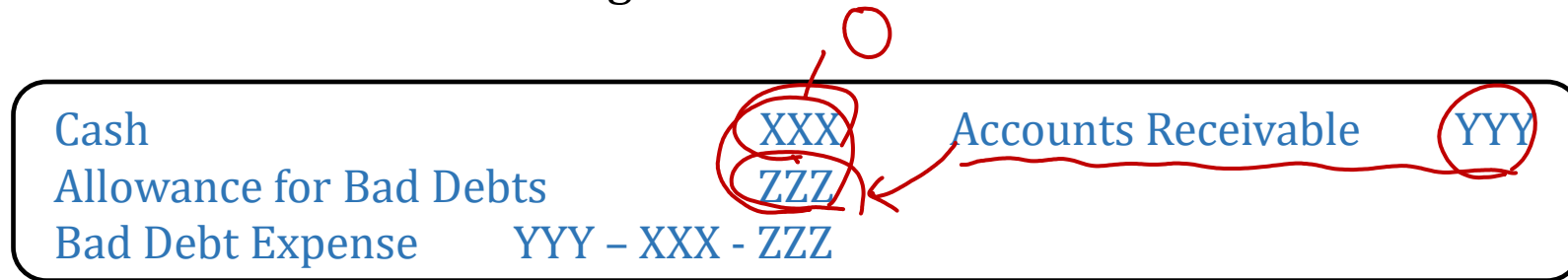
* "Bad Debt Expense" is an expense type account.

"Allowance for Bad Debts" is an asset type account (A contra account to Accounts Receivable).

Company ABC Income Statement		Company ABC Statement of Financial Position			
Sales Revenue	800	Cash	300	Bank loan from Shinhan	350
Cost of Goods	500	Account Receivable	800	Capital Stock	900
Bad Debt Expense	50	Bad Debt Allowance	(50)	Retained Earning	200
Net-Income	250	Inventory	400	Total equity	1,100
		Total assets	1,450	Total Liability and Equity	1,450

Settlement of Receivable

- Finally, it is settled that the account receivable is paid by cash (all, some, or nothing).
- If the final decision is made, we remove (derecognize) the relevant accounts from our accounting book.



2021. A/R \$500 Revenue \$500

2022 B/D \$80 A. for B/D \$80

2023 Cash \$400 A/R \$500

 A/B/D \$80

 B/D Expense \$20

Evaluation of Receivable (Aging)

- Estimating the value of accounts receivable
- Aging is one of the way to estimate the uncollectible amounts (and collectible amounts).
 - Each receivable is categorized by the number of days it has been outstanding (or the number of days from its due date).
 - Each total is multiplied by an appropriate uncollectible percentage. This is based on the assumption that the older the receivable, the less likely the company is to collect.
 - Usually, the uncollectible percentage is decided based on the historical records.

Evaluation of Receivable (Aging)

- Example

Book Value A/R

Before the due Date

Customer	Balance	Current	Days Past Due				
			1-30	31-60	61-90	91-120	Over 120
A. Adams	\$10,000	\$10,000					
R. Bartholomew	6,500			\$ 5,000			\$1,500
F. Christiansen	6,250	5,000	\$1,250				
G. Dover	7,260			7,260			
M. Ellis	4,000	4,000					
G. Erkland	2,250				\$2,250		
R. Fisher	1,500		500			\$1,000	
J. Palmer	1,500		1,500				
E. Zeigler	10,740	4,000	6,740				
Totals	<u>\$50,000</u>	<u>\$23,000</u>	<u>\$9,990</u>	<u>\$12,260</u>	<u>\$2,250</u>	<u>\$1,000</u>	<u>\$1,500</u>

Estimate of Losses from Uncollectible Accounts			
Age	Balance	Percentage Estimated to Be Uncollectible	Amount
Current	\$23,000	1.5	\$ 345
1-30 days past due	9,990	4.0	400
31-60 days past due	12,260	20.0	2,452
61-90 days past due	2,250	40.0	900
91-120 days past due	1,000	60.0	600
Over 120 days past due	1,500	80.0	1,200
Totals	<u>\$50,000</u>		<u>\$5,897*</u>

*Receivables that are likely to be uncollectible.

Evaluation of Receivable (Aging)

Customer	Balance	Current	Days Past Due				
			1-30	31-60	61-90	91-120	Over 120
A. Adams	\$10,000	\$10,000					
R. Bartholomew	6,500			\$ 5,000			\$1,500
F. Christiansen	6,250	5,000	\$1,250				
G. Dover	7,260			7,260			
M. Ellis	4,000	4,000					
G. Erklund	2,250				\$2,250		
R. Fisher	1,500		500			\$1,000	
J. Palmer	1,500		1,500				
E. Zeigler	10,740	4,000	6,740				
Totals	<u>\$50,000</u>	<u>\$23,000</u>	<u>\$9,990</u>	<u>\$12,260</u>	<u>\$2,250</u>	<u>\$1,000</u>	<u>\$1,500</u>

B D Expense 5897

A for B D 5897

$300 + 44,103 + 60,000$

Estimate of Losses from Uncollectible Accounts

Age	Balance	Percentage Estimated to Be Uncollectible
Current	\$23,000	1.5
1-30 days past due	9,990	4.0
31-60 days past due	12,260	20.0
61-90 days past due	2,250	40.0
91-120 days past due	1,000	60.0
Over 120 days past due	1,500	80.0
Totals	<u>\$50,000</u>	

*Receivables that are likely to be uncollectible.

Company ABC Statement of Financial Position			
Cash	300	Bank loan from Shinhan	4,000
Account Receivable	50,000		
Bad Debt Allowance	(5,897)	Capital Stock	90,000
Inventory	60,000	Retained Earning	10,403
		Total equity	100,403
Total assets	<u>104,403</u>	Total Liability and Equity	104,403

B/S

\$5,897*

Payable and Other Liability

- Payable
 - One type of liability
 - Obligation for money, goods, or services.
- Accounts Payable
 - A current liability representing money due for services received or merchandise purchased on credit.
- Advances from customers (or unearned revenue)
 - A money received but we have not provided merchandise or service to our customer
 - We will provide the merchandise or service in the future.

Bakery Case #3 (Week #1 Slides)

- AP Bakery Inc. started its business on 1st of November.
- All transactions were made by cash.

	Nov. 1st~Nov.30th	Dec. 1st ~ Dec. 31st	Jan. 1st ~ Jan. 31st
Shop rent (deposit)	1,500,000	-	-
Shop monthly rent fee	500,000	500,000	500,000
Oven, tables, and chairs purchase	8,000,000	-	-
Flour, sugar, and egg purchase	3,000,000	3,000,000	3,000,000
Number of baked muffins	10,000	10,000	10,000
Value of baked muffins	10,000,000	10,000,000	10,000,000
Number of sold muffins	8,000	9,000	9,500
Value of sold muffins	8,000,000	9,000,000	9,500,000
Electricity charge (paid on the 20th of every month)	200,000	600,000	900,000
Donation of muffins	-	-	-
Salary for Tom and Sam	2,000,000	2,000,000	2,000,000
Dividend to the shareholders		3,000,000	
Number of muffin gifticons issued			10,000
Received cash for the gifticon issuance			9,000,000

Bakery Case #3 (Week #1 Slides)

- In this case, **AP Bakery issued gifticons**, instead of borrowing money from a bank on Jan. 31st.
 - 1) On Feb. 1st, your cousin, Chris, said that he wanted to buy the whole AP Bakery Inc. What would be the appropriate amount for this deal?
 - 2) The gifticons were non-refundable. What would be your answer to Question#1?
 - 3) The gifticons were fully refundable. What would be your answer to Question#1?
 - 4) Is the amount different from Bakery Case #2?
 - 5) AP Bakery Inc. paid its electricity bill on Jan 20th. The bill covered the period between Dec 15th and Jan 15th. **The electricity charge between Jan. 15th and Jan. 31st would be 500,000 KRW.**

Does this additional information change the amounts that Chris may offer?

Payable and Other Liability

- Accounts Payable

- A company bought goods of \$400 on credit.

Inventory	\$400	Accounts Payable	\$400
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Liability

- // "Advances from customers" (or "unearned revenue") ✓

- A company issued 100 gifticons. It received \$500 of cash from customers.

Cash	\$500	Advanced from customers	\$500
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* "Cash" is an asset type account.

"Advanced from customers" is a liability type account ("Unearned revenue" is also liability.)

- A customer presented a gifticon. The company gave the customer the goods whose book value was \$4.

Advanced from customers	\$5	Revenue (I/S)	\$5
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Cost of goods	\$4	Inventory	\$4
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Any Questions?

Receivable and Payable(exercise)

- Self-Study Material (in the e-class, Chapter #6)

P 6-3

LO 3

Analysis of Allowance for Bad Debts

Boulder View Corporation accounts for uncollectible accounts receivable using the allowance method.

As of December 31, 2016, the credit balance in Allowance for Bad Debts was \$130,000. During 2017, credit sales totaled \$10,000,000, \$90,000 of accounts receivable were written off as uncollectible, and recoveries of accounts previously written off amounted to \$15,000. An aging of accounts receivable at December 31, 2017, showed the following:

Classification of Receivable	Accounts Receivable Balance As of December 31, 2017	Percentage Estimated Uncollectible	
Current	\$1,140,000	2%	✓✓
1–30 days past due	600,000	10	x✓
31–60 days past due	400,000	23	✓✓
Over 60 days past due	120,000	75	✓✓
	<u>\$2,260,000</u>		<u>264.800</u>

Required:

1. Prepare the journal entry to record bad debt expense for 2017, assuming bad debts are estimated using the aging of receivables method.
2. Record journal entries to account for the actual write-off of \$90,000 uncollectible accounts receivable and the collection of \$15,000 in receivables that had previously been written off.

Receivable and Payable(exercise)

- Self-Study Material (in the e-class, Chapter #6)

P 6-12

LO 5

Recording Notes Receivable

Wine Ltd. closes its books every month. On June 30 the Notes Receivable accounts balance is \$80,000, including the following:

Date	Maker	Face value	Term	Interest rate
May 4	KAVALAN Co.	\$16,000	50 days	8%
May 15	Glenlivet Inc.	14,000	6 months	12%
June 30	Macallan Co.	50,000	60 days	10%

Interest is computed following the practice that there are 360 days a year.

Required:

1. What's the maturity date of these three notes?
2. Suppose that Wine Ltd. prepares financial statements as of June 30. Make the entries necessary during June. Assume KAVALAN pays the note and interest in full at the maturity date.
3. Following (2), assume KAVALAN cannot pay the note and Wine Ltd. expects that there's hope for collection. Make the entry at the maturity date.
4. Following (2), assume KAVALAN cannot pay the note and Wine Ltd. expects that there's no hope for collection. Make the entry at the maturity date.

Any Questions?

Audit (Financial Statement Audit)

- You and your friends made Company ABC with \$80,000 of cash. You hired CEO, CFO, and other workers for the company. After one year, the CEO presented you the following financial statements.
- If you want to check a few things about the financial statements. What will you check?

Company ABC			
Statement of Financial Position			
DECEMBER 31, 2022			
Cash	6,500	Bank loan from Shinhan	10,000
Account Receivable	50,000		
Bad Debt Allowance	(4,600)	Capital Stock	80,000
Inventory A	40,000	Retained Earning	21,900
Inventory B	20,000	Total equity	101,900
Total assets	111,900	Total Liability and Equity	111,900

Company ABC	
Income Statement	
FOR THE YEARS ENDED DECEMBER 31, 2022	
Sales Revenue	125,000
Cost of Goods	80,000
Bad Debt Expense	4,600
Salary Expense	5,000
Interest Expense	3,000
Tax	10,500
Net-Income	21,900

Audit (Financial Statement Audit)

- The trusted third party (auditor) checks the financial statements.
 - Accounting information users can make a decision based on the **audit ed** financial statements.

<p style="text-align: center;">REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON CONSOLIDATED FINANCIAL STATEMENTS</p> <p><u>To the Shareholders and Board of Directors of Korea Electric Power Corporation</u></p> <p>Opinion on the Consolidated Financial Statements</p> <p><u>We have audited the accompanying consolidated statements of financial position of Korea Electric Power Corporation and subsidiaries (the "Company") as of December 31, 2020 and 2021, the related consolidated statements of comprehensive income (loss), changes in equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.</u></p> <p>We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated April 29, 2022 expressed an unqualified opinion thereon.</p> <p>Basis for Opinion</p> <p>These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.</p> <p>We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such</p>
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https://www.sec.gov/Archives/edgar/data/887225/000119312522132015/d276732d20f.htm#fin276732_1

<https://dart.fss.or.kr/dsaf001/main.do?rcpNo=20220321001499&dcmNo=8487719>

Any Questions?