Guideline	R25 Understanding Income Statements
Sessions and readings	SS7 Financial Reporting and Analysis: An Introduction SS8 FRA: Income Statements, Balance Sheets and Cash Flow Sheets R25 Understanding Income Statements R26 Understanding Balance Sheet R27 Understanding Cash Flow Statement R28 Financial Analysis Techniques SS9 FRA: Inventories, Long-lived Assets, Income Taxes and Non-Current Liabilities R29 Inventories R30 Long-Lived Assets R31 Income Taxes R32 Non-Current (Long-Term Liabilities SS10 FRA: Financial Reporting Quality and Financial Statement Analysis R33 Financial Reporting Quality R34 Financial Statement Analysis: Applications
Topics	a. describe the **components** of the income statement and alternative presentation formats of that statement; b. describe general principles of **revenue recognition** and accrual accounting, specific revenue recognition application (including accounting for long-term contracts, installment sales, barter transactions, gross and net reporting of revenue), and implications of revenue recognition principles for financial analysis; c. **calculate revenue** given information that might influence the choice of revenue recognition method; d. describe key aspects of the **converged accounting standards** issued by the International Accounting Standards Board and Financial Accounting Standards Board in May 2014; e. describe general principles of **expense recognition**, specific expense recognition applications, and implications of expense recognition choices for financial analysis; f. describe the financial reporting treatment and analysis of **nonrecurring items** (including discontinued operations, extraordinary items, unusual or infrequent items) and changes in accounting policies; g. distinguish between the operating and non-operating components of the income statement; h. describe how **earnings per share** is calculated and calculate and interpret a company's earnings per share (both basic and diluted earnings per share) for both simple and complex capital structures; i. distinguish between dilutive and antidilutive securities and describe the implications of each for the earnings per share calculation; j. convert income statements to **common-size income statements**; k. evaluate a company's financial performance using common-size income statements and financial ratios based on the income statements; l. describe, calculate, and interpret comprehensive income; m. describe other comprehensive income and identify major types of items included in it.

a. Components of Income Statement

Groupe Danone Consolidated Income Statement (in Millions of Euros) IFRS

	2009
Net revenue	14,982
Cost of goods sold	(6,749)
Selling expenses	(4,212)
General and administrative expenses	(1,356)
Research and development expenses	(206)
Other revenue (expense)	(165)
Trading operating income	2,294
Other operating income(expense)	217
Operating income	2,511
Interest revenue	76
Interest expense	(340)
Cost of net debt	(264)
Other financial revenue (expense)	(225)
Income before tax	2,022
Income tax	(424)
Income from fully consolidated companies	1,598
Share of profits of associates	(77)
Net income from continuing operations	1,521
Net income from discontinued operations	-
NET INCOME	1521
Attributable to the Group	1,361
Attributable to minority interests	160

Kraft Foods and Subsidiaries Consolidated Statement of Earnings (in Millions of Dollars) GAAP

	2009
Net revenues	40,386
Cost of sales	25,786
Gross profit	14,600
Marketing, administration, and research costs	9,108
Asset impairment and exit costs	(64)
(Gains)/Losses on divestitures, net	6
Amortisation of intangibles	26
Operating income	5,524
Interest and other expenses, net	1,237
Earnings from continuing operations before income taxes	4,287
Provision for income taxes	1,259
Earnings from continuing operations	3,028
Earnings and gain from discontinued operations, net of income taxes	-
Net earnings	**3028**
Non-controlling interest	7
Net earnings attributable to Kraft Foods	3021

1. Revenues are the amounts reported from the sale of goods and services in the normal course of business.
   -Net revenue means that revenue number is reported after adjustments (e.g., discounts, estimated returns)

   Expenses reflect outflows, depletion of assets, and incurrences of liabilities in the course of the activities of a business. Include: cost of goods sold, operating expenses, interest, and tax.

2. Expenses grouped by nature or function.
   -Nature: Research and development expenses, Marketing expenses etc.
   Function: COGS

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<td>3. Net income can be defined as:
Net income=revenues-ordinary expenses+ other income- other expenses+ gain- losses
-Gain/Loss may or may not result from ordinary business activities, for example, sell equipment: difference between sale price and book value is reported as gain or loss
-Gross profit: when an income statement shows a gross profit, it is use multi-step format rather than single-step format
-Operating profit: results from deducting operating expenses from gross profit, reflects company's profit on its usual business activities
-Minority interest: share of subsidiary's income not owned by parent is reported on parent's income statement</td>
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<td>b.c. revenue recognition</td>
<td>1. Accrual method of accounting
- revenue is recognized when earned and expenses are recognized when incurred
-does not necessarily coincide with receipt or payment of cash
-can manipulate net income

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<td>According to IASB, revenue is recognized from the sale of goods when:
1. The risk and reward of ownership is transferred.
2. There is no continuing control or management over the goods sold.
3. Revenue can be reliable measured.
4. There is a probable flow of economic benefits.
5. The cost can be reliably measured.

For services rendered, revenue is recognized when:
1. The amount of revenue can be reliably measured.
2. There is a probable flow of economic benefits.
3. The stage of completion can be measured.
4. The cost incurred and cost of completion can be reliably measured.</td>
<td>According to FASB, revenue is recognized in the income statement when:
1. realized or realizable
2. earned

SEC provides additional guidance:
1. There is evidence of an arrangement between buyer and seller.
2. The product has been delivered or the service has been rendered.
3. The price is determined or determinable
4. The seller is reasonably sure of collecting the money</td>
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Example: unearned revenue (L), prepaid expenses (A), accounts receivable (A), accounts payable (L)</td>
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3. Specific Revenue Recognition Applications

3.1

Long-Term Contracts	IFRS	GAAP
Outcome can be reliably estimated	Percentage of completion method	
Outcome cannot be reliably estimate	Revenue is recognized to the extent of contract costs	Completed-contract method

Example:
Kolenda Technology Group has a contract to build a network for a customer for a total sales price of $10 million. This network will take an estimated three years to build. Project costs as follows:

Year	1	2	3	Total
Cost	3 million	2.4 million	0.6 million	6 million

If outcome can be reliably estimated under GAAP or IFRS:

Percentage of completion method

Revenue measured by total cost incurred divided by total expected cost

Year	1	2	3	Total
Cost	3	2.4	0.6	6
Revenue	(3/6)x10=5	(2.4/6)x10=4	(0.6/6)x10=1	10
Profit	2	1.6	0.4	4

Revenue recognition to the extent of contract costs: IFRS

Year	1	2	3	Total
Cost	3	2.4	0.6	6
Revenue	3	2.4	**4.6**	10
Profit	0	0	4	4

Completed contract method: GAAP

Year	1	2	3	Total
Cost	0	0	**6**	6
Revenue	0	0	**10**	10
Profit	0	0	4	4

3.2

Installment Sales: company finance a sale, and payments are received over extended period	IFRS	GAAP
collectability is certain	Sale price=discounted present value of installment payments, the difference between sale price and total installment payments attributable to interest revenue. The guidance for revenue recognition must be considered in light of local laws.	Normal revenue recognition
collectability is uncertain		Installment method: Profit is recognized as **cash** collected. **Or** Cost recovery method: Profit is recognized only when total cash collected exceeds costs incurred.

Example:
Assume that BBB property Corp. sells a property for $1000. The original cost(purchase price) is **$800**. Collections received by BBB are as follows:

	2015	2016	2017	Total
Collections	$400	$400	$200	$1000

Installment method

	2015	2016	2017	Total
Collections	$400	$400	$200	$1000
Profit	**400x20%=80**	80	40	200

Cost recovery method

	2015	2016	2017	Total
Collections	$400	$400	$200	$1000
Profit	**0**	0	200	200

What is cost?

	3.3 Barter transaction: two parties exchange goods or services without cash payments. - Under IFRS, revenue from barter transactions must be measured based on the fair value of revenue from similar non-barter transactions with unrelated parties - Under GAAP, revenue can be recognized at fair value only if a company has historically received cash payments for such services P/E vs P/S (Amazon, JD) 3.4 Gross versus Net Reporting of revenue - Gross revenue reporting: the selling firm reports sales revenue and COGS separately - Net revenue reporting: only the difference in sales and cost reported -Following criteria must be met to use gross revenue under GAAP • Be the primary obligor under the contract • Bear the inventory risk and credit risk • Be able to choose its supplier • Have reasonable latitude to establish the price
d. Converged accounting standards issued by IASB and FASB in May 2014	1. In May 2014, IASB and FASB issued converged standards for revenue recognition that are scheduled go into effect for periods beginning after Dec. 15, 2016 for GAAP, Jan 01, 2017 for IFRS. 2. The converged standards identify a five-step process for recognizing revenue: 1. Identify the contracts with a customer 2. Identify the performance obligations in the contract. 3. Determine the transaction price. 4. Allocate the transaction price to the performance obligations in the contract. 5. Recognize revenue when the entity satisfies a performance obligation.
e. expense recognition	1. Under the accrual method of accounting, expense recognition is based on **matching principle** whereby expenses to generate revenue are recognized in the same period as the revenue. For example: inventory purchased in Dec. 2015 and sold in Jan 2016. **Period costs**, expenditures that less directly match revenues, are reflected in the period when a company makes the expenditure or incurs the liability to pay 2. Inventory Expense Recognition(R29): -FIFO, LIFO, Weighted average method, Specific Identification

Method	Assumption	COGS	Ending Inventory
FIFO(GAAP and IFRS)	The items first purchased are the first to be sold.	First purchased	Most recent purchases
LIFO(GAAP)	The items last purchased are the first to be sold.	Last purchased	Earliest purchases
Weighted average cost(GAAP and IFRS)	Items sold are a mix of purchases.	Average cost of all items	Average cost of all items

3. Depreciation Expense Recognition (R30)

-Straight line depreciation expense $= \frac{cost - residual\ value}{useful\ life}$

-DDB(double declining balance) depreciation expense=$\frac{2}{useful\ life}(cost - accumulated\ depreciation)$

Example:

Littlefield Company recently purchased a machine at a cost of $12,000. The machine is expected to have a residual value of $2000 at the end of its useful life in five years. Calculate book value in beginning of third year using the double declining balance method.

Answer:
Year1: (2/5)x(12000)=$4800
Year2: (2/5)x(12000-4800)=$2880
Book value in beginning of third year=12000-(4800+2880)=4320

4. Amortization Expense Recognition (R30)
5. Bad debt expense and warranty expense recognition

f. analysis of nonrecurring items and changes in accounting policies

	Discontinued operations	Extraordinary items	Unusual or infrequent items
Definition	When a company disposes of or established a plan to dispose of one of its component operations and will have no further involvement in the operation	Both unusual and infrequent. Example: 1. Losses from expropriation of assets. 2. Gains or losses from early retirement of debt 3. Uninsured losses from natural disasters	Example: 1. Gains or losses from the sale of assets or part of a business 2. Impairments, write-offs, write-downs, and restructuring costs.

Reporting in Income Statement	Net of tax, report separately after continuing operations	Net of tax, report separately after continuing operations	Pretax basis, included in continuing operations

Example:
https://www.siemens.com/annual/14/en/download/pdf/Siemens_AR2014_ConsolidatedFinancialStatements.pdf

2. change in accounting principle
-change from GAAP or IFRS method to another(e.g. LIFO to FIFO). Usually requires retrospective application, except change to LIFO from another.

3. change in accounting estimate, applied prospectively (e.g. change estimate life of long lived assets)