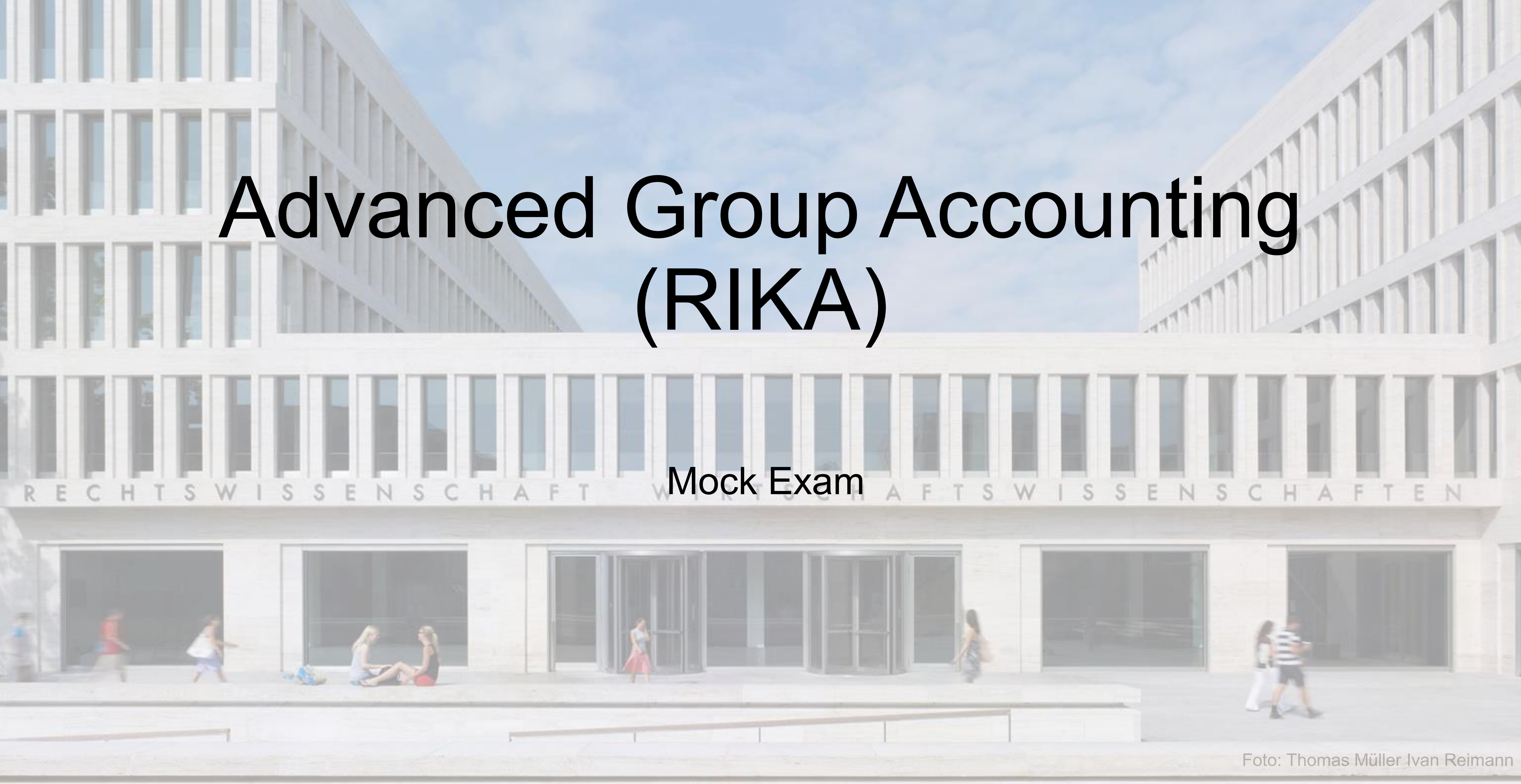

Advanced Group Accounting (RIKA)

Mock Exam

Foto: Thomas Müller Ivan Reimann

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an der Deloitte-Stiftungsprofessur für Accounting & Sustainability Reporting

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14. Juli 2025

Fachbereich Wirtschaftswissenschaften

Deloitte-Stiftungsprofessur für Accounting & Sustainability Reporting

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Course Evaluation

- Please take 5min and evaluate our course! ☺

Course:	**Rechnungslegung im Konzernabschluss RIKA**
Lecturer:	**Prof'in. Dr. Katharina Hombach**
Evaluation date:	**18.07.2025, 14:00 - 16:00 Uhr**
URL:	**http://r.sd.uni-frankfurt.de/ff60a493**
QR-Code:	

Your Questions

- *Are we expected to know all the formulas from Lecture 6 for the exam?*

→ Yes, you need to be able to apply ratio analyses and the models we learned in the lecture.

- *In Task 2 of the study from Block 6, how exactly is the average days Receivables calculated?*

→ Average days receivables: 365/Receivables Turnover (where Receivables Turnover = Average Accounts Receivable/Sales)
  - → Best day Ltd.: 365/10.24 = 35.66 Days
  - → SleepFast Inc.: 365/33.59 = 10.87 Days

Your Questions

- *Do you expect us to know exact/word for word IFRS definitions or which IFRS principal #'s when defining things like control, power, significant influence, or goodwill for example?*

→ You need to understand and be able to explain key definitions (not word-by-word but you need to know the key components of such definitions)

- *Will the tables for consolidation/subsequent consolidation be given to us, just like in the mock or will we need to draw them in the actual exam?*

→ Surely, its given ;)

- *Will the ratio of theory questions to calculation questions be similar to the mock? I assume then no multiple choice questions like the ones on Moodle.*

→ Multiple choice questions are not part of the exam. In general, there will be tasks that ask you to calculate and tasks that ask for e.g., theoretical foundations.

- *Are you awarding ‚Folgefehler', if we make a mistake for example in calculating revalued equity or when deciding what is operational and financial when calculating NOA/NFO? If we then use those incorrect values but still do everything else correct, do we still get points?*

→ Sure!

Your Questions

- *When asked for journal entries, are points awarded for the position (ex. Cr. Non-current assets) and the # of CU (e.x. 5 CU) separately?*

→ There is not a „hard" system – you do get points for both (e.g., when the acconts are correct but the values are wrong you still get some the points)

- *Can we combine journal entries on the exam? For example, when booking fair value adjustments on non-current assets to DTL and equity for initial consolidation, or when splitting up depreciation to NCI and Profit in subsequent consolidation. Can we just write for example:*

  Dr. Non-current assets 100

  Cr. Equity 70

  Cr. DTL 30

→ Sure, if your JEs result in the same – sure (but be cautious with combining too much, you might forget a step)

- *You state that we ‚may' round our interim results to full numbers on the exam. Does that mean we don't need to always round and can keep at 2 decimal places? (Just for clarification)*

→ Both would be correct. If you decide to take the full number you would probably end up with a slightly different result compare to using rounded interim results – but – both will get the full points (if correct)

Your Questions

- *When you ask us to decompose RoE, do you want us to list the values for leverage, NBC, etc. separately or can we just perform the calculation in one step?*

→ Please calculate step-by-step (it might also help you to get part of the points if you made a mistake at some point…)

- *When correcting intra-group transactions, we correct revenue with cost of sales and inventory. We also correct DTA. When correcting DTA, we Dr. DTA and Cr. which account exactly? In the lecture/self study, we sometimes used Cr. Deferred tax expense and sometimes Cr. Income tax expense. Does it matter?*

→ In CR: Deferred tax income & In DR: Deferred tax expense

Your Questions

- *Block 6 Question 1. b) Self-study: ‚The answer states: Yes. The average return on Cherry's operations is its RNOA of 22.81%, so NBC after tax of less than 15% would result in a positive spread.'. Don't you mean NBC after tax of less than 22.81% and not 15%? 15% will always result in a positive spread.*

→ The answer simply means that every value for NBC that is smaller than the value for RNOA (22.81%) would result in a positive spread.

Exercise 1)

- Task:
  - Please name **five** key differences between an asset versus a share deal. You can use the table below to structure your answer.

Solution 1)

Asset Deal	Share Deal
Acquirer interacts with Target‘s management	Acquirer interacts with Target‘s shareholders (hostile takeover possible)
Acquirer gets ownership of target’s assets.	Acquirer obtains control over target (typically, by acquiring the majority of voting rights).
Target typically ceases to exist as a separate legal entity after the transactions.	Target can continue to exist as a legal entity after the transaction.
No need for consolidation - all assets are already on Acquirer’s balance sheet	Need for consolidation - investment shown in Acquirer’s balance sheet does not reflect economic fundamentals of the business group
Stock financing uncommon	Stock financing possible to mitigate overpayment / undervaluation

Exercise 2)

- Task:
  - Please explain the concept of “control” as in IFRS 10 and distinguish it from the concept of “power.” Further, name three factors to consider in assessing “power”.

Solution 2)

- Control exists when an investor has all of the following three elements:
  - A) power over the investee
  - B) exposure, or rights, to variable returns from its involvement with the investee and
  - C) the ability to use its power over the investee to affect the amount of the investor’s returns

- Model: Power-so-as-to-benefit model

- Factors to consider in assessing power:
  - (relative) size of voting rights
  - dispersion of other shareholdings
  - level of disorganization / apathy among other shareholders
  - attendance at annual general meetings
  - contractual arrangements

Exercise 3)

- Facts
  - Taunus AG acquired 75% of the Main AG for a cost of 25,000 CU. All identifiable assets and liabilities were recorded at fair value, with the exception of land which carries a hidden reserve of 3,000 CU. The tax rate is 30%. At the acquisition date, the equity of Main AG consisted of:

Item	Balance in CU
Share capital	9,000
General reserve	7,000
Retained earnings	8,000

Exercise 3)

- Tasks
  - a) Please shortly explain what is meant by the term “non-controlling interest”.
  - b) Please account for the non-controlling interest measured at **fair value** (full goodwill method) in comparison to measuring at **proportionate share in net assets** (partial goodwill method) using the table above.

Solution 3)

- a) NCI is the term used for the ownership interest in a subsidiary other than the parent. It is defined in IFRS 10 as: the equity in a subsidiary not attributable, directly or indirectly, to a parent.

Solution 3)

	Full Goodwill Method	Partial Goodwill Method
Purchase Price	25,000	25,000
Non-controlling interest at fair value	8,333.33	
Non-controlling interest at 25% of identifiable net assets		6,525
Total	33,333.33	31,525
Fair value of 100% identifiable net assets	26,100	26,100
Goodwill	7,233.33	5,425
Amount recognized of non-controlling interest	8,333.33	6,525

Exercise 4)

- Facts:
  - At the end of 20X1, Yoga AG acquired 90% of the capital of Relax AG for 300,000 CU in cash. The carrying amounts and fair values of the assets and liabilities recorded by Relax AG as of 31.12.20X1 were as follows:

	Carrying amount	Fair Value
Non-current assets	294,000	390,000
Liabilities	64,000	64,000

  - Yoga AG uses the **full** goodwill method. The tax rate is 30%.

Exercise 4)

- Tasks:
  - a) Please provide the journal entries for the first-time consolidation on 31.12.20X1 and fill out the consolidated worksheet provided below.
  - b) Please explain the need to eliminate intra-group transactions in consolidated financial statements.
  - c) In 20X2, the following transactions occur:

    Yoga AG sold inventory costing (historical cost) 18,000 CU to Relax AG for 23,000 CU. One-third of this was sold for 9,500 CU to an external party and one-third for 9,000 CU to another external party.

  Please provide the journal entries to eliminate the intra-group transaction as of 31.12.20X2.
  - d) Please provide the necessary journal entries for the subsequent consolidation of the non-current assets as of 31.12.20X2. Assume that as of 01.01.20X2, the assets have a remaining useful life of 5 years and are depreciated on a straight-line basis.

Solution 4a)

- 1. Revaluation

Dr. Non-current assets 96,000

Cr. Deferred tax liability 28,800

Cr. Equity 67,200

- 2. Pre-acquisition entries

Revalued Equity = 230,000 (equity)

+ 96,000 (1 – 30%) (non-current assets)

= 297,200

Consideration transferred = 300,000 + 33,333.33 = 333,333.33

Goodwill total = 333,333.33 – 297,200

= 36,133.33

Goodwill to NCI = 36,133.33 x 0.1 = 3,613.33

Goodwill of the parent = 333,333.33 – 297,200x0.9

= 32,520

Solution 4a)

Dr. Equity	267,480	
Dr. Goodwill	32,520	
Cr. Investment in Relax		300,000

NCI share of equity:

Dr. Equity	29,720
Dr. Goodwill	3,613.33
Cr. NCI	33,333.33

Solution 4a)

	Yoga AG		Relax AG		Revaluation		Sum balance		Consolidation		Consolidated Financial Statements	
					Dr.	Cr.			Dr.	Cr.		
Non-current assets	*21,000*		*294,000*		*96,000*		*411,000*				*411,000*	
Investment in Relax AG	*300,000*						*300,000*			*300,000*	*0*	
Goodwill									*32,520* *3,613.33*		*36,133.33*	
Current assets	*143,000*						*143,000*				*143,000*	
Deferred tax asset												
Equity		*394,000*		*230,000*		*67,200*		*691,200*	*267,480* *29,720*			*394,000*
Non-controlling interest										*33,333.33*		*33,333.33*
Debt		*70,000*		*64,000*				*134,000*				*134,000*
Deferred tax liability						*28,800*		*28,800*				*28,800*
Sum	*464,000*	*464,000*	*294,000*	*294,000*			*854,000*	*854,000*			*590,133.33*	*590,133.33*

Solution 4b)

- Consolidated financial statements can only account for assets, liabilities and profits that are with external parties. Intra-group transactions need to be adjusted since these are within a group and do not include an external party.

→ entity concept of consolidation: the group is defined as net assets of the parent and the net assets of the subsidiary → leads to adjustment of intra-group transactions

Solution 4c)

- Transaction in 20X2

Dr. sales revenue 23,000

Cr. COGS 21,333.33

Cr. Inventory 1,666.66

Dr. DTA 500

Cr. Deferred Tax Income 500

Solution 4d)

- Depreciation:

Dr. Profit 19,200 Cr. Non-current assets 19,200

- Adjust NCI share of profit:

Dr. NCI 1,920 Cr. Profit 1,920

- Reversal of deferred tax liability:

Dr. DTL 5,760 Cr Profit 5,760

- Adjust NCI share of profit:

Dr. Profit 576 Cr NCI 576

Exercise 5)

- **Facts**

Financial AG has purchased 30% of the shares of Managerial GmbH for 5,200 CU as of 01.01.20X1.

The equity of Managerial GmbH at the acquisition date was:

Item	Balance in CU
Share capital	4,000
Equity Reserve	3,000
Retained Earnings	2,100

- As of 01.01.20X1, hidden reserves (remaining useful life: 10 years) have an amount of 800 CU.

The profit of Managerial GmbH is as follows:

In 20X1, Managerial GmbH distributes 20X0's profits of 300 CU and generates a profit for the year 20X1 of 500 CU.

Exercise 5)

- Tasks
  - a) Please apply the equity method to account for the investment in Financial AG’s consolidated financial statements in 20X1 using the information above.
  - b) Please give the appropriate journal entries to account for the investment in Financial AG’s consolidated financial statements in 20X1.

Solution 5)

- a) *Initial measurement and purchase price allocation:*

Investment BV = Purchase Price = 5,200

BV of Equity = 30% * (4,000+3,000+2,100) = 2,730

Hidden Reserves = 30% * 800 = 240

Goodwill = 2,230

- *Subsequent valuation:*

Investment BV as of 01.01.20X1 = 5,200

+ proportionate profit 20X1 = 30% * 500 = 150

- proportionate distribution = 30% * 300 = 90

- depreciation of hidden reserves = 240/10 = 24

Investment book value as of 31.12.20X1 = 5,236

Solution 5)

- b) JE (3p):

1) Dr. Investment in Managerial GmbH 126

    Cr. Income from investment in Managerial GmbH 126

2) Dr. Cash 90

    Cr. Investment in Managerial GmbH 90

Exercise 6)

- **Task**
  - Please name the four phases of a typical M&A process. For each phase, please briefly explain what the subject of that phase is and which decisions are made during the phase. You can use the table below for illustration.

Solution 6)

1. Negotiation and Pre Deal	2. Due Diligence	3. Closing	4. Post Deal Integration
Screening and target selection	Data room	Binding offer	Integration of operations
First evaluation	Preparation of financial model and valuation	Structuring of the transaction (incl. financing)	Accounting integration
Indicative offer	Legal due diligence and review of documents	Signing of Sale and Purchase Agreements (SPA)	
Non Disclosure Agreement (NDA)	Decision on financing and structuring of the transaction	Determination of purchase price for accounting purposes	

Exercise 7)

- **Facts**

The exhibit below provides you with the financial statements of Goethe AG for the year 20X1. Goethe AG is a long-established German firm, which business model is to sell souvenirs and readings from Johann Wolfgang von Goethe.

Goethe AG's main geographic market is Europe.

To store excess liquidity, Goethe AG has made some equity investments, which are accounted for as associated entities. Goethe AG does not have a strategic interest in these entities.

Goethe AG derives all interest income from securities held for trading and associated entities.

Goethe AG's provisions relate to legal disputes concerning using rights of the readings.

Assume that Goethe AG's cash is classified as operating.

Exercise 7)

Balance Sheet	20X1
Assets	
Non-current	
Intangibles	4,000
Goodwill	4,300
Property, Plant & Equipment	5,800
Investments in associates	800
Current	
Securities held for trading	1,300
Trade accounts receivable	1,100
Inventories	2,900
Cash and cash equivalents	3,100
TOTAL	23,300
Equity &Liabilities	
Common stock	5,600
Retained earnings	5,500
Total shareholders' equity	11,100
Non-current liabilities	
Provisions	500
Long-term debt	3,900
Current liabilities	
Accounts payable	3,500
Deferred revenue	4,300
TOTAL	23,300

Profit & Loss Statement	20X1
Sales	33,000
Cost of sales	-19,000
Gross profit	14,000
R&D expense	-2,100
SG&A expense	-3,200
Other operating income	4,100
Other operating expense	-150
Operating profit (EBIT)	12,650
Income from associates held at equity	150
Interest income	150
Interest expense	-1,000
Profit before tax	11,950
Tax expense	-2,988
Net income (available to group)	8,963

Exercise 7)

- a) Please decompose Goethe AG's return on equity using the Advanced DuPont model.
- b) Please discuss (verbally, without reference to the transaction above) how the results of an Advanced DuPont model differ between otherwise identical companies that account for their non-controlling interests under the full fair value and partial goodwill method, respectively. (4 points)

Solution 7a)

Analytical Financial Statements	Goethe AG
Net operating assets (NOA)	12,900
Net financial obligations (NFO)	1,800
Effective tax rate (ETR)	25.00%
Net operating income (NOI)	9,488
Net financing expense (NFE)	525
Equity direct	11,100
Equity (NOA - NFO)	11,100
Profit after tax direct	8,963
Profit after tax (NOI - NFE)	8,963
Advanced DuPont Analysis	Goethe AG
Return on net operating assets (RNOA)	73.55%
Net borrowing costs (NBC)	29.17%
Spread (RNOA - NBC)	44.38%
Leverage (NFO / Equity)	0.16
ROE (via advanced DuPont decomposition)	80.74%
ROE (direct)	80.74%

Solution 7b)

- Equity increases (and leverage decreases) under full goodwill method compared to partial goodwill method due to the higher balance sheet total under full goodwill method. [depends on classification of NCI as operating or financial; if financial: full goodwill method higher NFO and hence higher leverage; effect on NBC depends]; Partial goodwill: lower equity base, leverage boosts (potentially) ROE

Exercise 8)

- **Task**

Please discuss (qualitatively) how M&A transactions affect a business group's consolidated RNOA (Return on net operating assets) and consolidated leverage.

Under which conditions does a transaction lead to higher/lower ratios?

Solution 8)

Consolidated RNOA: How much does the target contribute to the RNOA of the corporate group?

- Unconsolidated RNOA of Target, relative to that of corporate group
- Negative: increases in NOA due to uncovering of identifiable assets, fair value adjustments, and goodwill; reductions in revenues due to elimination of intra-group revenues; reductions in NOI due to depreciation and amortization on fair value adjustments
- Positive: synergies (to the extent not captured by goodwill)

Consolidated leverage

- Effect depends on financing of transaction
- Increase in leverage due to capital consolidation (equity)
- Potential reduction in leverage due to elimination of intra-group liabilities

Good Luck for the final exam!