# Advanced Group Accounting (RIKA) 

Faculty: Prof. Dr. Katharina Hombach (hombach@econ.uni-frankfurt.de)
TA: Inga Meringdal, M.A.(meringdal@econ.uni-frankfurt.de)

## Self-Study Exercises Lecture Block 2: Acquisition Method

## Exercise 1: Business Combinations and Goodwill

## Fact Pattern:

On 1 January 20x5, Akquirer Corporation acquired $100 \%$ of Zeller for $€ 75,000$ in cash.

|  | Akquirer | Zeller |
| :--- | :--- | :--- |
| 31 December 20x4 Balance Sheets |  |  |
| Cash | $€ 3,000$ | $€ 2,000$ |
| Accounts receivable - net | 1,000 | 3,000 |
| Inventory | 6,000 | 5,000 |
| Plant assets - net | 25,000 | 20,000 |
| Total assets | $€ 35,000$ | $€ 30,000$ |
| Current liabilities | $€ 4,000$ | $€ 3,000$ |
| Bonds payable | 6,000 | 7,000 |
| Total liabilities | $€ 10,000$ | $€ 10,000$ |
| Common stock, par $€ 1$ per share | $€ 2,000$ | $€ 1,000$ |
| Additional paid-in capital | 6,000 | 7,000 |
| Retained earnings | 17,000 | 12,000 |
| Total stockholders' capital | $€ 25,000$ | $€ 20,000$ |
| Total liabilities plus stockholders' equity | $€ 35,000$ | $€ 30,000$ |

- Except for PP\&E, there are no differences between fair values and book values. On 1 January $20 \times 5$, the fair value of Zeller's plant assets amounts to $€ 23,000$. The fair value of Akquirer's plant assets is $€ 32,000$. Both companies depreciate PP\&E over 10 years on a straight-line basis.


## Exercise

- Please calculate Zeller's goodwill as indicated by the transaction:
a) Without considering taxes
b) Considering taxes, assuming a tax rate of $30 \%$.
c) How does the consideration of taxes change the purchase price allocation? Please provide an economic interpretation.


## Exercise 2: Deferred Taxes

## Fact Pattern:

Company A acquires $100 \%$ shares of company B for $€ 40$ million in 20X1.
The only intangible asset of $B$ (not recognized) is a self-generated brand (estimated brand value: €8 million)
The other assets contain hidden reserves of $€ 6$ million.
Assume that under tax law there is no fair value adjustment.

|  | Company B |  |
| :--- | :--- | :--- |
| Cash | 20 | Common stock |
| Other assets | 40 | Debt |

To account for the acquisition, Company A shows the following journal entry:
Dr. XXXX
Cr. Deferred Tax Liability 5.6
Cr. XXX

## Exercise:

a) Please calculate the statutory tax rate that would be consistent with the journal entry above.
b) Please calculate the goodwill or gain on bargain purchase that results from the transaction, assume that tax rate calculated in a).
c) Please perform the purchase price allocation for the transaction above, assuming a tax rate of $30 \%$ (different from the one calculated in a)).

## Exercise 3: Non-controlling interest

## Fact Pattern:

On 1 July 20X3, Heron Ltd. acquired 60\% of the shares of Petrel Ltd. for € 45,000 when the equity of Petrel Ltd. consisted of:

| Equity: |  |
| :--- | :--- |
| Share Capital | 42,000 |
| Retained Earnings | 2,000 |

All the identifiable assets and liabilities of Petrel Ltd. were recorded at fair value expect for equipment and inventory:

| Accounts: | Carrying <br> Amount | Fair Value |
| :--- | :--- | :--- |
| Equipment (cost 250,000) | 180,000 | 200,000 |
| Inventory | 40,000 | 50,000 |

The tax rate is $30 \%$.

## Exercise:

Determine NCl share of equity at acquisition date

1. as the proportionate share of revalued net assets
2. full fair value.
