**Receivables:** Definition

- **Definition:**
  Receivables are financial instruments according to the definition in IAS 32.11:
  
  A **financial instrument** is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another company.

- Receivables are recorded if conditions for revenue recognition are met but cash inflow has not yet occurred:
  - revenues on account, revenues from credit sales
  - receivables include any taxes the seller collects on behalf of the government, in particular VAT.
Receivables: Characteristics

- **Classification**
  - current receivables: expected to be collected within a year
  - noncurrent receivables: all others

- Trade receivables: amounts owed by customers for goods sold and services rendered
- Nontrade receivables: arise from a variety of transactions
  - e.g. interest, royalties, dividends, compensation for damages

- Most relevant standards:
  - IFRS 9 Financial Instruments / IAS 39
  - IFRS 15 Revenue from contracts with customers
Accounting treatment for VAT

• Example
  – invoice: Gross amount: 1000, including 25% VAT
    • usually VAT has to be separately shown in the invoice
  – revenue × (1 + 25%) = 1000
    • revenue = 1000/1.25 = 800
  – Journal entries:
    Dr.: Customer 1000
    Cr.: revenue 800
    VAT 200
Revenue recognition revisited

• Accounting regulation (IFRS 15 Revenue from Contracts with customers)

Revenue is to be recognized when all of the following conditions are met

– A contract is present that has been approved by contracting parties and identifies obligations and payment terms
– The entity has satisfied the performance obligation by transferring an asset as agreed upon in the contract
  • The asset has been transferred when the customer obtains control of the asset

• **Transaction price** is to be recognized

• specific cases
  – right of the customer to return the goods: recognition depends on the amount of risk that customer will exercise this right
  – warranty claims do not prevent revenue recognition but they lead to a provision (a separate debt item)
Initial Recognition of Accounts Receivable

• usual way if a credit sale occurs
  – record the sale as revenue and record an increase in accounts receivable

  | Accounts Receivable | € XYZ |
  | Revenue             | € XYZ |

• Basis for recognition: Transaction price (IFRS 15.47)
  – Transaction price is defined as the amount the entity expects to be entitled from a customer, excluding amounts collected on behalf of third parties
    • Sales taxes and discounts must be deducted

• interest not recognized, no discounting (immaterial)
Discounts

• Trade Discounts
  – used to avoid frequent changes in catalogues
  – allow for different prices for different quantities
  – hide true invoice price from competitors

• Sales Discounts
  – offered to induce prompt payment
  – usually 2% - 3% if payment occurs within 10 days, net amount due within 30 days
  – foregoing the discount is expensive (in terms of opportunity costs!)
    ➔ e.g. not using a 2% discount means incurring a 36.9% interest on the discounted balance!!

\[
98\left(1 + \frac{20}{360} \cdot r\right) = 100
\]
Two methods of accounting for sales discounts

• (1) Gross method
  – initially recognize gross amount
  – recognize sales discounts when they are taken

• (2) Net method
  – initially recognize amount net of sales discount
  – make „correcting“ entries if sales discounts are forfeited

*from an accounting point of view* ⇒ net method preferable
  why? amount recognized closer to net realizable value

*from a practical point of view* ⇒ gross method preferable
  why? easy to apply, no additional calculation necessary
Note that discounts apply to VAT too

- both revenue and VAT amounts are reduced by the discount percentage

- Example:
  - Invoice: 1000 + 200 VAT
  - 2% discount used
    - Customer pays: 1176
  - Journal entries:
    - when revenue is recognized using the *gross method*
    - Dr. Accounts receivable: 1200
      - Cr. Sales Revenue: 1000
      - VAT: 200
    - payment:
      - Dr. Cash: 1176
      - Sales discount: 20
      - VAT: 4
      - Cr.: Accounts receivable: 1200
Subsequent Valuation of Accounts Receivable

- Receivables are measured at amortized cost in accordance with IFRS 9.4.1.2
- Write-off:
  - An entity shall directly reduce the carrying amount of a financial asset when the entity has no reasonable expectations of recovering a financial asset in its entirety or portion thereof.
  - E.g. a customer files bankrupt
- Loss allowance for expected credit losses
  - For trade receivables a loss allowance equal to lifetime expected credit losses shall be recognized
  - Expected credit losses are measured to reflect an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes
  - Calculations are to be based on available information from past events, current conditions and forecasts
Direct Write-Off

- If a specific account is considered uncollectible
  - Either (a) accounts receivable or (b) an allowance for expected credit losses (if present) is affected

(a) If no allowance for expected credit losses has been recognized beforehand accounts receivable needs to be credited and an expense is debited:

- Bad debt expense € XYZ
- Accounts receivable € XYZ

(b) If an allowance has been recorded the carrying amounts of the allowance and accounts receivable are subject to write-off:

- Allowance for doubtful accounts € XYZ
- Accounts receivable € XYZ
Allowance for expected credit loss

• Recognition of the allowance
  – If an expected credit loss is present
  – Bad Debt Expense recorded in the same period as the credit sale
  – Debit Bad Debt Expense and credit Allowance for uncollectible (or Doubtful) Accounts

<table>
<thead>
<tr>
<th>Bad Debt Expense</th>
<th>€ XYZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for Doubtful Accounts</td>
<td>€ XYZ</td>
</tr>
</tbody>
</table>

• Two approaches to estimate credit losses:
  – percentage-of-sales
  – percentage-of-receivables
Percentage-of-Sales (Income Statement) Approach

• Bad Debt Expense as a percentage of credit sales during the accounting period
  – percentage determined from past experience and future expectations
  – amount to be recognized = percentage uncollectible × credit sales

• Example
  – Credit sales amounted to € 760,000 while 3%, on average, deemed uncollectible

| Uncollectible Accounts Expense | 22,800 |
| Allowance for Uncollectible Accounts | 22,800 |
Percentage-of- Receivables (Balance Sheet) Approach

- allowances for doubtful accounts made depending on the aging schedule of outstanding receivables
  - percentages for different age categories determined from past experience and future expectations

NOTE:
- Percentage-of-receivable $\rightarrow$ focus on balance sheet account
- Percentage-of-sales $\rightarrow$ focus on income statement account

• Different focus of approaches:
  - Percentage -of-sales approach implicitly assumes that annual credit sales are linearly related to bad debt amount!
  - Percentage –of-receivables approach assumes that a linear relationship exists between the amount of credit sales outstanding at the balance sheet date and the amount of bad debt
Example of an *aging schedule* under the percentage-of-receivables approach

The (uncollected) credit sales of Paper Company in its first year of business amount to:

<table>
<thead>
<tr>
<th>Month</th>
<th>Customer</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>Holm</td>
<td>10.000</td>
</tr>
<tr>
<td>Feb.</td>
<td>Lowe</td>
<td>2.000</td>
</tr>
<tr>
<td>August</td>
<td>Smith (I)</td>
<td>8.000</td>
</tr>
<tr>
<td>Nov.</td>
<td>Miller</td>
<td>20.000</td>
</tr>
<tr>
<td>Dec.</td>
<td>Baker</td>
<td>6.000</td>
</tr>
<tr>
<td></td>
<td>Cooper</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Gardener</td>
<td>3.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>50.000</strong></td>
</tr>
</tbody>
</table>
### Aging schedule for year 1
(prepared on December 31, year 1):

<table>
<thead>
<tr>
<th>Age category</th>
<th>Amount</th>
<th>Percentage uncollectible</th>
<th>Uncoll. amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 30 days</td>
<td>10,000</td>
<td>(B,C,G) 5%</td>
<td>500</td>
</tr>
<tr>
<td>31 – 90 days</td>
<td>20,000</td>
<td>(M) 10%</td>
<td>2,000</td>
</tr>
<tr>
<td>91 – 180 days</td>
<td>8,000</td>
<td>(S I) 15%</td>
<td>1,200</td>
</tr>
<tr>
<td>&gt;180 days</td>
<td>12,000</td>
<td>(H,L) 25%</td>
<td>3,000</td>
</tr>
</tbody>
</table>

**Targeted balance for Allowance for Uncollectible Accounts**

6,700
Journal entries and accounts in year 1:

Uncollectible accounts expense 6,700
Allowance for uncollectible accounts 6,700

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>Allowance for uncoll. accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000</td>
<td>6,700</td>
</tr>
</tbody>
</table>

Net realizable value of accounts receivable: 43,300
(uncollected) credit sales in year 2:

<table>
<thead>
<tr>
<th>Month</th>
<th>Customer</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>Koller</td>
<td>2,000</td>
</tr>
<tr>
<td>March</td>
<td>Deutsch</td>
<td>40,000</td>
</tr>
<tr>
<td>July</td>
<td>Franco</td>
<td>6,000</td>
</tr>
<tr>
<td>August</td>
<td>Weyer</td>
<td>1,000</td>
</tr>
<tr>
<td>Sept.</td>
<td>Hunger</td>
<td>12,000</td>
</tr>
<tr>
<td>Nov,</td>
<td>Smith (II)</td>
<td>9,000</td>
</tr>
<tr>
<td>Dec.</td>
<td>Camillo</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Total: 74,000
Other information for year 2:

- Payments received from outstanding year-1 receivables
  - Holm 10,000
  - Miller 20,000
  - Smith (I) 8,000

- Write-offs of year-1 receivables
  - Cooper 1,000
  - Gardener 3,000

- Open accounts from year 1
  - Baker 6,000
  - Lowe 2,000
### Aging schedule at the end of year 2:

<table>
<thead>
<tr>
<th>Age category</th>
<th>Amount</th>
<th>Percentage</th>
<th>Uncoll. amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 30 days</td>
<td>4,000</td>
<td>5%</td>
<td>200</td>
</tr>
<tr>
<td>31 – 90 days</td>
<td>9,000</td>
<td>10%</td>
<td>900</td>
</tr>
<tr>
<td>91 – 180 days</td>
<td>19,000</td>
<td>15%</td>
<td>2,850</td>
</tr>
<tr>
<td>&gt;180 days</td>
<td>50,000</td>
<td>25%</td>
<td>12,500</td>
</tr>
</tbody>
</table>

**Targeted balance for Allowance for Uncollectible Accounts**: 16,450
Determining bad debt expense for year 2:

Targeted balance for allowance for u.a. 16,450
less credit balance from prior year – 6,700
plus debits due to write-offs + 4,000
\[\text{13,750}\]

Accounts Receivable

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>Allowance for uncoll. Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>8,000</td>
<td>8,000</td>
</tr>
<tr>
<td>74,000</td>
<td></td>
</tr>
<tr>
<td>82,000</td>
<td></td>
</tr>
</tbody>
</table>

\[\text{Red} – \text{write-offs}; \text{blue} – \text{collections yr.1}; \text{green} – \text{adj. yr.2}\]
Remarks

• Net realizable value of receivables at the end of year 2
  - 82,000 – 16,450 = 65,550

• In year 2: net realizable value of year-1 receivables after write-offs but before collections is the same as at the end of year 1, i.e. is equal to € 43,300

• Accounts written-off in year 2 „accounted“ for just € 200 of allowance for uncollectible accounts in year 1

• Balance of € 6,700 in Allowance for Uncollectible Accounts account from year 1 matters for determining bad debt expense (uncollectible accounts expense) in year 2
Recovery of accounts receivable written-off

- Allowance subject to previous write-off
  - reestablish the receivable written-off
  - debit Cash and credit Accounts Receivable

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>1.100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for Uncollectible Accounts</td>
<td>1.100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash</th>
<th>1.100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts Receivable</td>
<td>1.100</td>
</tr>
</tbody>
</table>

- Direct write-off
  - Debit Cash
  - Credit Uncollectible Amounts Recovered
Economic evaluation of allowing for bad debt

- Two contrasting views:
  1. „In God we trust. All others pay cash.“ (anonymous)
  2. If the percentage of uncollectibles is below some percentage of all receivables, our credit policy is too tight and we forego business.

- According to view #1, uncollectible accounts expense represents unnecessary expenses that reduce profits.

- According to view #2, uncollectible accounts expense is a „necessary evil“ associated with credit sales but these credit sales are a means to increase and repeat business.
  - in advance it is not known which accounts will turn bad
Recognition of Notes Receivable

- A promissory note is a written promise to pay a certain sum of money at a specific future date.
  - payee – holder of note; regards it as note receivable → asset
  - maker – issuer of note; regards it as note payable → liability
  - terms are negotiable
  - stronger legal claim than accounts receivable
  - some notes are tradable

- Short-term notes recorded at face value
  - interest immaterial

- Long-term notes recorded at present value of cash expected to be collected

- Accounting for notes receivable:
  - similar to accounting for accounts receivable
  - notable difference in recognition of interest
    - topic will be dealt with under „liabilities“, i.e. notes payable
Disposition of Accounts Receivable and Notes Receivable

- growing popularity of credit sales soaked up cash of the selling companies
- means to accelerate receipt of cash:
  - transfer accounts or notes receivable to another company, e.g. bank or factor
- finance charge associated with these transactions
- transfer of receivables via
  - secured borrowing
  - sales of receivables

differ in some legal aspects and accounting treatment
Sale of Receivables

- An account receivable that ZiscoSys holds is sold to Deutsche Factors (a fictitious commercial factor). The receivable amounts to €15,000 and the factor takes a 4% finance charge.
- Journal entries that both companies would make as a result of the transaction.

<table>
<thead>
<tr>
<th>ZiscoSys</th>
<th>Deutsche Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>Accounts Receivable 15,000</td>
</tr>
<tr>
<td>14,400</td>
<td></td>
</tr>
<tr>
<td>Loss on Sale of Receivables</td>
<td>Financing Revenue 600</td>
</tr>
<tr>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable 15,000</td>
<td>Cash 14,400</td>
</tr>
<tr>
<td></td>
<td>600</td>
</tr>
</tbody>
</table>