



# ASSETS AND LIABILITIES

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# Plan of the class

1. Balance sheet
2. Assets and their types
3. Liabilities and their types
4. Owner's equity



# Balance sheet

## Example Company Balance Sheet December 31, 2017

### ASSETS

What the company owns.

Current assets  
Investments  
Property, plant, and equipment  
Intangible assets  
Other assets  
Total assets

### LIABILITIES & OWNER'S EQUITY

What the company owes.

Current Liabilities  
Long-term liabilities  
Total liabilities

Shareholder's equity.

Owner's equity  
Total liabilities & owner's equity

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNER'S EQUITY}$$

# Assets

- all things that company owns
- anything tangible or intangible that can be owned or controlled to produce value and that is held by a company to produce positive economic value is an asset. It is the value of ownership that can be converted into cash.
- they include for example: cash, accounts receivable, inventory, supplies, prepaid insurance, land, buildings...
- types of assets:
  1. Current assets
  2. Investments
  3. Property, plant and equipment (fixed assets)
  4. Intangible assets
  5. Other assets

# A1: Current assets

- cash and other resources that are expected to turn to cash or to be used up within one year of the balance sheet date.
- usually they are presented in the order of liquidity
- types of current assets:
  - a) Cash and cash equivalents
  - b) Short-term investments
  - c) Receivables
  - d) Inventory
  - e) Prepaid expenses
- supplies can belong to inventory if they are expected to be used within a year



# Cash and cash equivalents

-includes e.g.:

cash (in SVK we have a €5,000 and €15,000 limit)

cash equivalents (stamps, lunch vouchers...)

deposit accounts in banks (fixation up to 1 year)

-very **high liquidity**

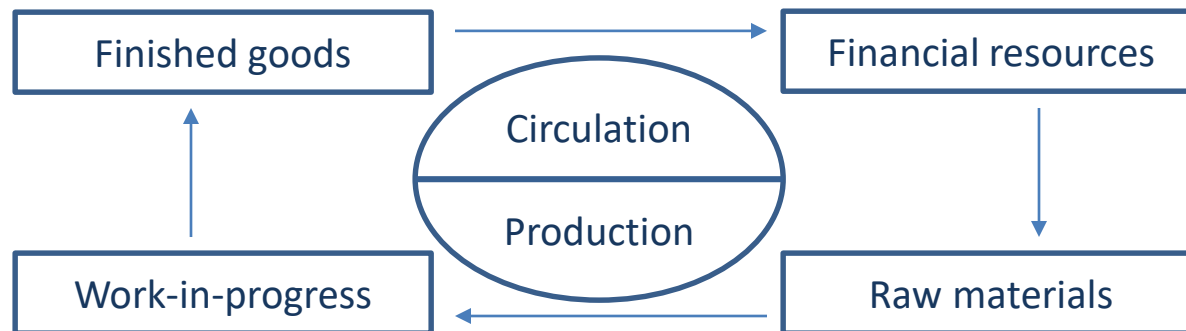
-foreign currency?

# Receivables

- receivables, also referred to as **accounts receivable**, are debts owed to a company by its customers for goods or services that have been delivered or used but not yet paid for
- short-term: due date up to 1 year
- long-term: due date over 1 year
- e.g. if a company sells cars and sells 30% of them on credit, it means 30% of the company's receipts are receivables. That is, the cash has not been received but is still recorded on the books as revenue. Instead of an increase in cash, the company credits accounts receivable. They are both considered an asset, but a receivable is not considered cash until it is paid. If the customer pays the bill in six months, on the seventh month the receivable is turned into cash and the same amount of cash received is deducted from receivables.

# Inventory

- the goods available for sale and raw materials used to produce goods available for sale.
- one of the most important assets of a business because the turnover of inventory represents one of the primary sources of revenue generation and subsequent earnings for the company's shareholders
- 3 types: **raw materials**, **work-in-progress** and **finished goods**





# A2: Investments

- long-term investments belong to this group
- they are to be held for many years and are not intended to be disposed of in the near future
  - a) Investments in securities
    - bond, stock, long-term notes...
  - b) Investments in fixed assets not used in operations
    - land or property bought for re-sale, works of art...
  - c) Investments in special funds
    - pension funds, sinking funds...
- also different forms of insurance might belong here



# A3: Fixed assets

- PPE: property, plant and equipment
- assets and property that cannot easily be converted into cash
- they are purchased for continued and long-term use in earning profit in a business
- usually of significant value and long-term use
- they include **land, buildings, machinery** (incl. trucks, cars...), **furniture, fixtures, tools, IT equipment, certain resources** (timber, minerals, depending on what the firm does)
- e.g. in SVK their purchasing cost is min. 1,700 €
- depreciation / amortization!



# A4: Intangible assets

- they lack physical substance and usually are very hard to evaluate
- they include copyrights, patents, goodwill, trade names, trademarks, franchises...
- they are the most important contributor to the disparity between company value as per their accounting records, and company value as per their market capitalization
- e.g. in SVK their purchasing cost is min.  
2,400 €
- amortization!



# A5: Other assets

- long term assets that are not classified as investments, property, plant, equipment, or intangible assets
- an example is bond issue costs that are amortized to expense over the life of the bonds
- advances to employees
- of a minor importance

# Depreciation

- pretty complicated, but important concept ☺
- fixed assets lose their (moral and physical) value in time due to their use and R & D -> need for depreciation
- an accounting method of allocating the cost of a tangible asset over its useful life** used to account for declines in value
- businesses depreciate long-term assets for both tax and accounting purposes
- for tax purposes, businesses can deduct the cost of the tangible assets they purchase as business expenses; however, businesses must depreciate these assets according to national rules about how and when the company can take the deduction
- numerous methods, depending on the country

# Example

-you buy a car in January 2022 which costs 20,000 euros



-you can't claim an expense of **20,000 euros** in that year and lower your tax liabilities by that amount

-e.g. in Slovakia you have to depreciate car for **4 years**, which means you have to claim an expense of **5,000 euros** each year for four years in a row and lower your tax liabilities

# Straight-line method

-a method of computing depreciation and amortization by dividing the difference between an asset's cost and its expected salvage value (residual value) by the number of years it is expected to be used

$$\text{annual depreciation expense} = \frac{\text{cost of fixed asset} - \text{residual value}}{\text{useful life of asset}(\text{years})}$$

# Straight-line method

-for tax purposes the number of years is often set and the residual value is zero

-e.g. depreciating an engine bought in *January* 2022 for € 30,000 and with 6 years depreciation time in Slovakia:

Year	Calculation of depreciation	Depreciation expense	Book value at year end
2022	30 000/6	5 000	25 000
2023	30 000/6	5 000	20 000
2024	30 000/6	5 000	15 000
2025	30 000/6	5 000	10 000
2026	30 000/6	5 000	5 000
2027	30 000/6	5 000	0



# Straight-line method

*-e.g. depreciating an engine bought in **April** 2022 for € 30,000 and with 6 years depreciation time in Slovakia:*

Year	Calculation of depreciation	Depreciation expense	Book value at year end
2022	$(30\,000/6)/12*9$	3 750	26 250
2023	$30\,000/6$	5 000	21 250
2024	$30\,000/6$	5 000	16 250
2025	$30\,000/6$	5 000	11 250
2026	$30\,000/6$	5 000	6 250
2027	$30\,000/6$	5 000	1 250
2028	$(30\,000/6)/12*3$	1 250	0

# Straight-line method

## -straight-line method in Slovakia

Group	Time	Example of a fixed asset
0	2 years	Electric cars (both battery and plug-in)
1	4 years	Cows, sheep, goats, pigs, geese, technical glass, computers, consumer electronics, office machinery, motor vehicles, bicycles...
2	6 years	Horses, wooden / plastic constructions, clocks, batteries, household appliances, boat engines, metal forming machines, trolleybuses, motor vehicle trailers, motorcycles...
3	8 years	Electric motors, combustion engines, turbines, furnaces...
4	12 years	Prefabricated concrete / metal buildings, steam boilers, weapons, boats, ships, locomotives, airplanes...
5	20 years	All buildings not included in group 6
6	40 years	Apartments, hotels, administrative buildings, cultural buildings...

# Accelerated method

- any method of depreciation used for accounting or income tax purposes that allows greater deductions in the earlier years of the life of an asset
- while the straight-line depreciation method spreads the cost evenly over the life of an asset, an accelerated depreciation method allows the deduction of higher expenses in the first years after purchase and lower expenses as the depreciated item ages = tax advantage in first years
- e.g. double declining method
- e.g. sum-of-the-year's-digits method
- always depends on what the law allows

# Double declining method

-doubling the speed of depreciation compared to straight-line method, keeping the number of years constant

-e.g. depreciating an engine bought in January 2022 for € 30,000 and with 6 years depreciation time, using a DD method:

*Normally 1/6th of original cost, with DD 1/3rd of book value*

Year	Calculation of depreciation	Depreciation expense	Book value at year end
2022	30 000/3	10 000	20 000
2023	20 000/3	6 667	13 333
2024	13 333/3	4 444	8 889
2025	8 889/3	2 963	5 926
2026	5 926/3	1 976	3 950
2027	Residual value	3 950	0

# SYD method

-summing all the digits of the expected life of the asset to a base and depreciating starting with the highest digit

-e.g. depreciating an engine bought in January 2022 for € 30,000 and with 6 years depreciation time, using a DD method:

*1+2+3+4+5+6=21; 1st year: 6/21, 2nd year: 5/21, 3rd year: 4/21...*

Year	Calculation of depreciation	Depreciation expense	Book value at year end
2022	$30\,000 \cdot (6/21)$	8 571	21 429
2023	$30\,000 \cdot (5/21)$	7 143	14 286
2024	$30\,000 \cdot (4/21)$	5 714	8 572
2025	$30\,000 \cdot (3/21)$	4 286	4 286
2026	$30\,000 \cdot (2/21)$	2 857	1 429
2027	$30\,000 \cdot (1/21)$	1 429	0

# Why depreciation?

- for **companies**:

- tax benefit (as an expense it reduces a company's net income)

- accelerated depreciation is associated with lower initial tax liabilities

- for **governments**:

- securing stable tax revenue

- avoiding tax speculation

# Why depreciation?

In January 2022 we bought an apartment for 200 000 €, which (based on the Slovak law) has to be depreciated for 40 years. We rent it out for 6 000 € annually.

## IF DEPRECIATION DID NOT EXIST

Year	Cost	Revenue	Profit
2022	200 000	6 000	Loss
2023	0	6 000	6 000
...			
2061	0	6 000	6 000
<hr/>			
<i>TOTAL</i>	<i>200 000</i>	<i>240 000</i>	<i>234 000</i>

## WITH DEPRECIATION

Year	Cost	Revenue	Profit
2022	5 000	6 000	1 000
2023	5 000	6 000	1 000
...			
2061	5 000	6 000	1 000
<hr/>			
<i>TOTAL</i>	<i>200 000</i>	<i>240 000</i>	<i>40 000</i>

# Depreciation - example

A Slovak company bought for its business activities a fixed asset – combustion engine for a purchasing price of 33,600 euros.

- a) How many years will it take to depreciate it according to the Slovak laws?
- b) Calculate depreciation expenses for years 2022 and 2023 using straight-line method if:
  - it was bought in January 2022
  - it was bought in May 2022
- c) Calculate depreciation expenses for the cases in b using the double-declining method.



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Total liabilities & owner's equity

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNER'S EQUITY}$$

# Liabilities

- company's legal financial debts or obligations that arise during the course of business operations
- they are settled over time through the transfer of economic benefits including money, goods or services

A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits.

- they can be owed to government, businesses, employees, customers...
- two types of liabilities:
  1. Current liabilities
  2. Long-term liabilities

# L1: Current liabilities

- company's debts or obligations that are due within **one year** or within a normal operating cycle
- current liabilities are settled by the use of a current asset, such as cash, or by creating a new current liability
  - a) **short-term debt**: -loans up to 1 year
  - b) **accounts payable**: -unpaid supplier invoices
  - c) **accrued liabilities**: -an expense that a business has incurred but has not yet paid (e.g. payroll taxes)
  - d) **other current liabilities**: -income taxes payable  
-interest payable

# L2: Long-term liabilities

- liabilities that are due **beyond a year** or the normal operation period of the company
- also called long-term debt
- they (might) include:
  - a) **bonds payable**
  - b) **loans payable**
  - c) **deferred tax liability**
  - d) **pensions payable**
  - e) **post-retirement healthcare obligation**
  - f) **finance lease payable**

# Owners' equity

- an amount of funds contributed to the company by the owners
- in private limited companies, businesses and owners are separate = **owner's equity** is what businesses own to the owner(s)
- when the owners are shareholders, it is called shareholders' equity
- firms total assets minus its liabilities
- it includes many different types, such as:
  - share capital / common stock
  - retained earnings
  - reserve

# Financing

-companies finance their development from **own sources** and from **external sources** (=liabilities)

**Own sources:** mostly **profit** and **depreciation**

- companies do not increase their indebtedness = their dependence on external capital is lower
- usually are connected with lower costs than external sources
- ...or **funds**
- Legal Reserve Fund can only be used to cover losses
- other „voluntary“ funds can be used for anything

**External sources:** credits, loans, leasing, bonds...

- sometimes they are cheaper than own resources

Why should we use own sources?

Why should we use foreign sources?