



Durable assets

Depreciation

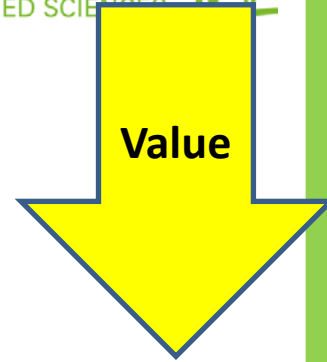


Depreciation

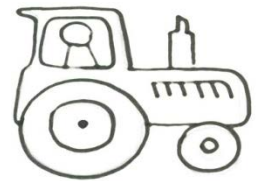
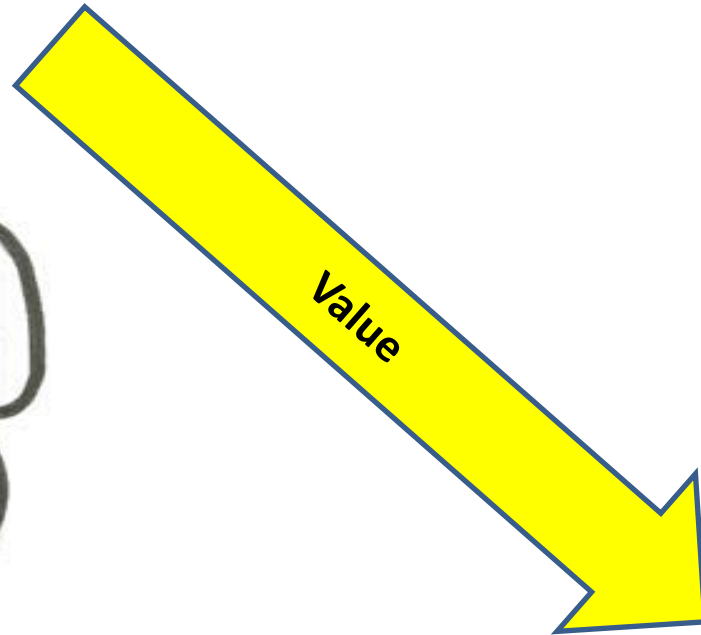
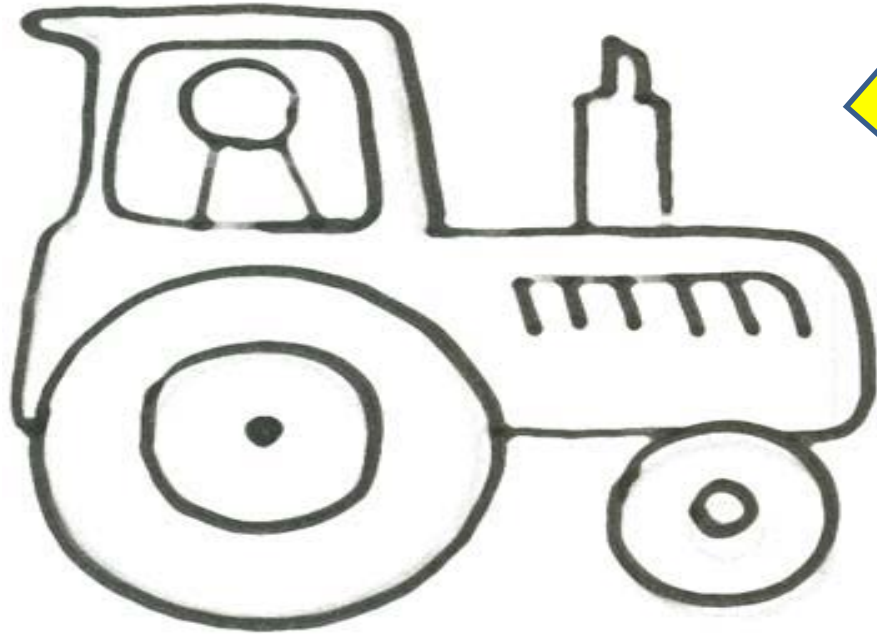
- When assets lose their utility value over time

or become unusable over time due to wear and tear or technical obsolescence

- Result = Depreciation of capital assets



1 2 3 4 5 6 7 8 9 10





Why are we writing off?

- Keeping records on depreciation
- Depreciation = Expenses

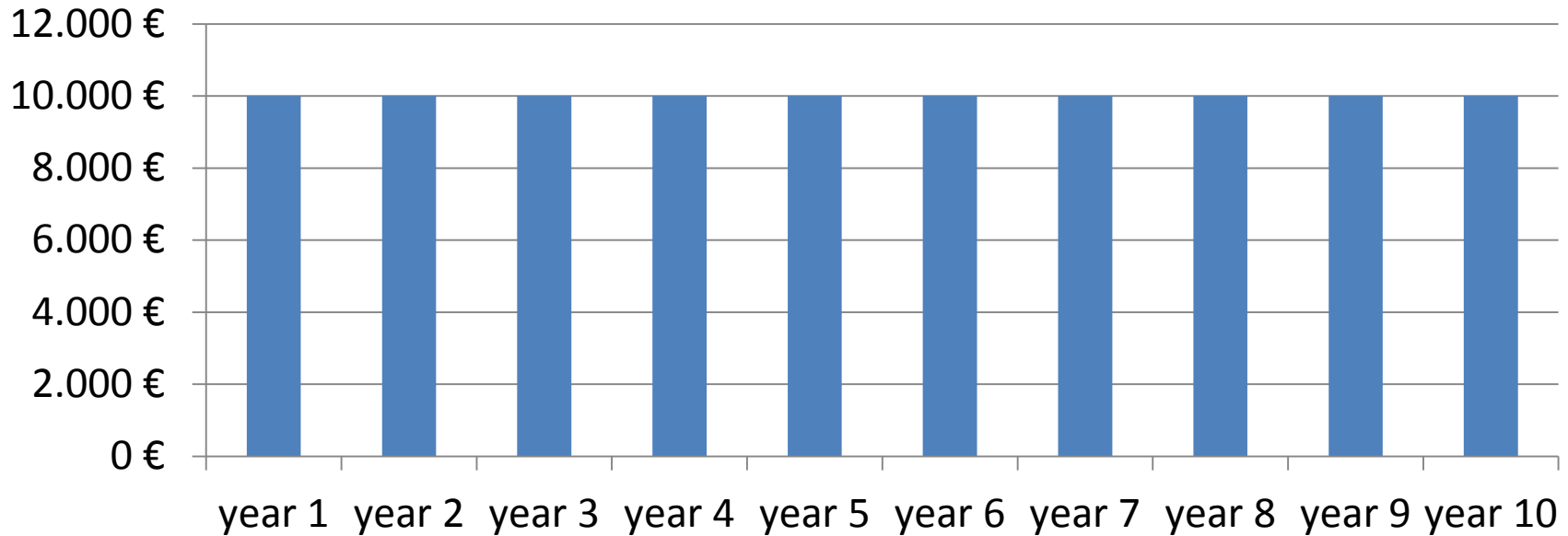
Expenses = Profit reduction

= Deduction of profit-related taxes

Distribution of purchasing costs



100.000 €



Terminology



Purchasing costs

- Price of the machine
- Amount paid at purchase

Residual value

- Value after operating life

Book value

- Value in accounting

Reasons for utilization limits



a) Technical or
substantial
obsolescence

New technology, PC, cell
phone or
decay of rubber and
plastic

b) Wear of the machine
through usage

High mileage, hours of
use,...

Depreciation threshold



Performance reserve

10 000 h

or

10 years

Depreciation threshold

= Performance reserve h/ performance reserve yrs.

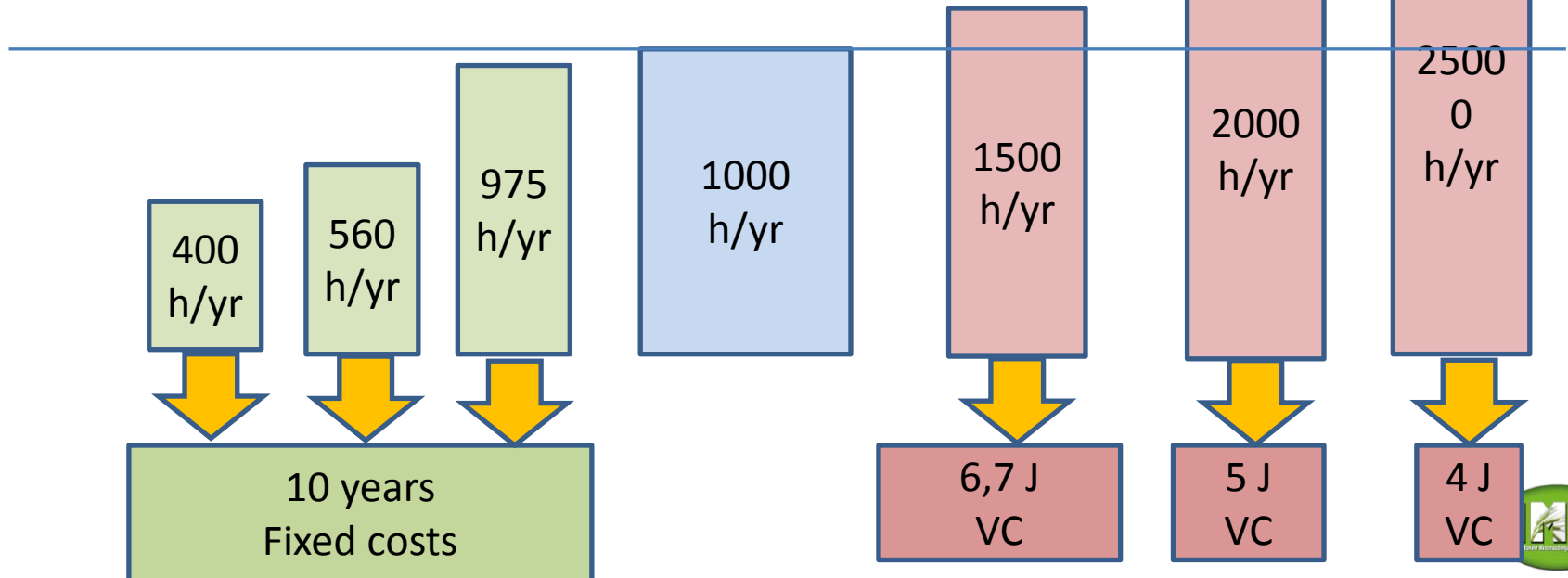
= 10 000 h/10 yrs.

= 1000 h/yr.

Depreciation threshold

10 000 h or 10 years

> 1000 h/yr
Faster depreciation
< 10 years

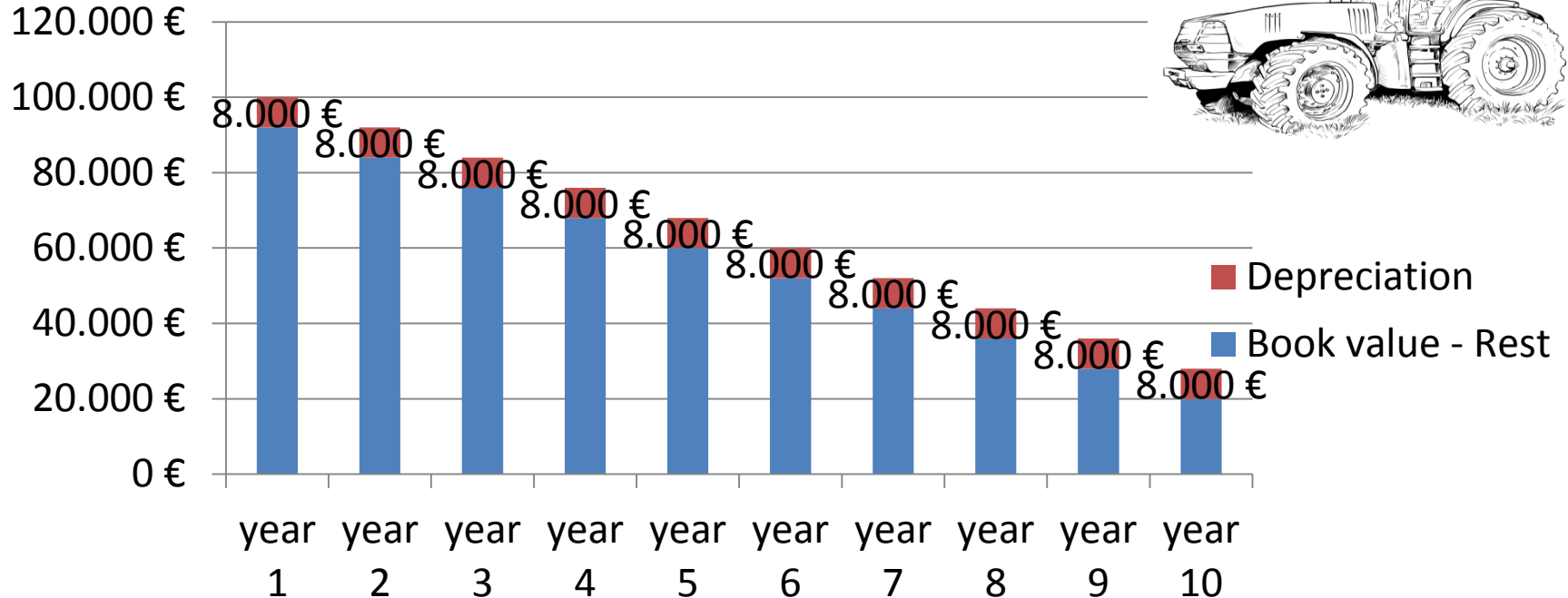
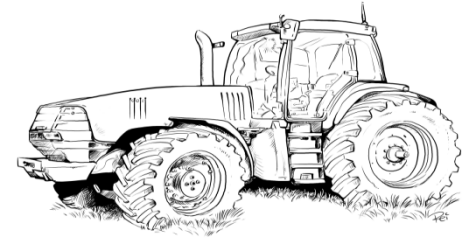


$$\text{Linear depreciation} = \frac{\text{Purchasing costs} - \text{Residual value}}{\text{Years of usage}}$$

- Easy to calculate
- Appropriately distributed over usage period
- Works for annually equal usage
- Nominal maintenance of assets
- Real maintenance of assets only in case of constant prices (no inflation)

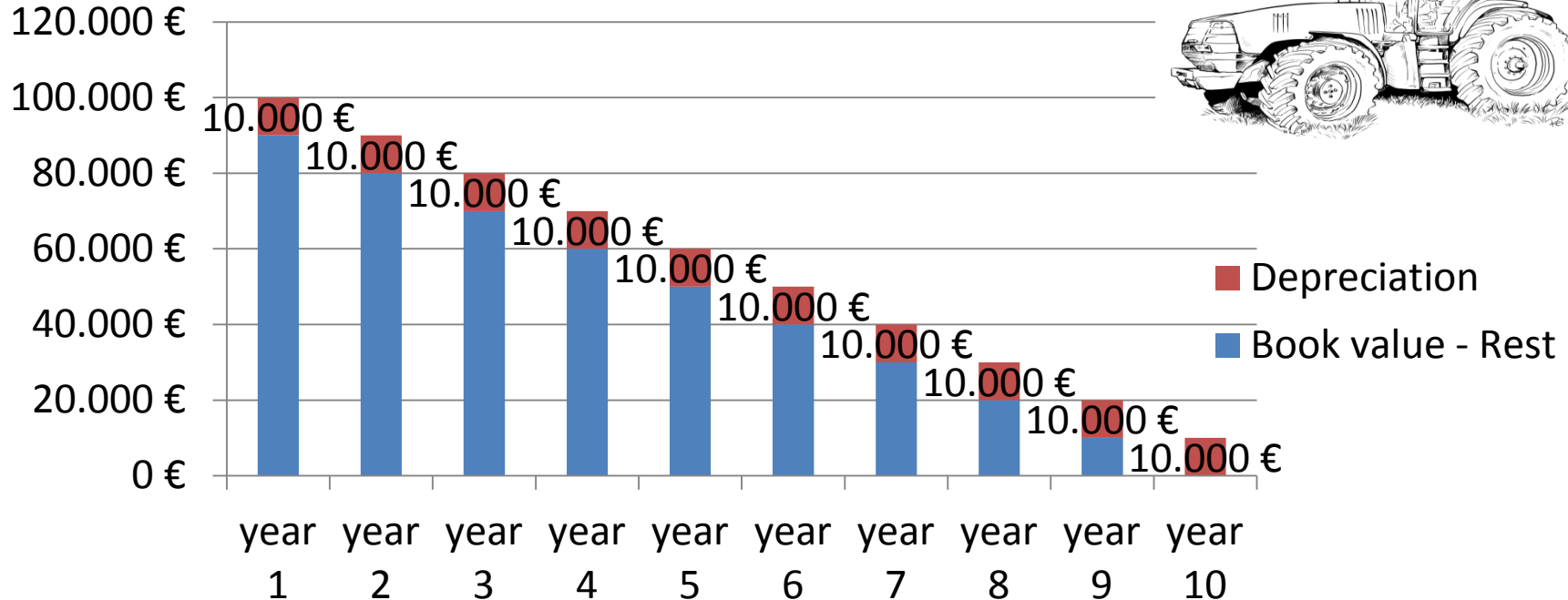
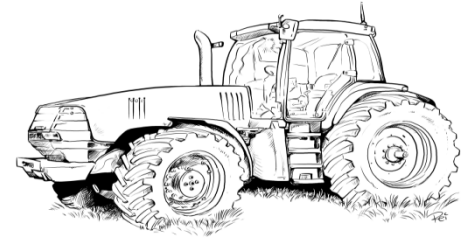
Example tractor (200 hp)

Alexander 600 h/yr



Example tractor (200 hp)

Boris 1000 h/yr





Perspective

- High increase in prices -> Depreciation of replacement value
- Unequal usage each year -> Unit-of-production depreciation
- Value-over-time = Resale value -> Declining-balance-method
- Value-over-time = Repayment process of an annuity loan
-> Progressive depreciation