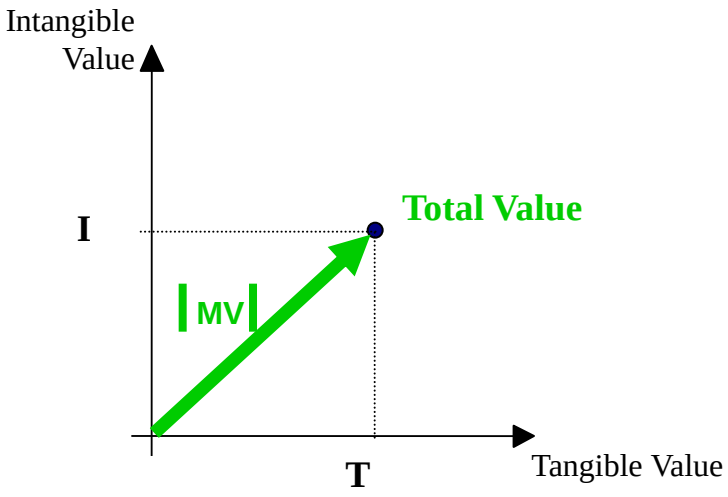
# XXL Economy
# The Intangible Evaluation

# The Theory

Version 3.0

# The total value of a company is the sum of its Tangible and Intangible Assets




The Total Value (TV) is the result of a vector addition:
T = Tangible (money based assets)
I = Intangible (know how, rights, etc)

$$\vec{TV} = \vec{T} + \vec{I}$$

The absolute value of the vector represents the Market Value (MV) and to calculate it we use *Pythagoras*:

$$|MV^2| = T^2 + I^2$$

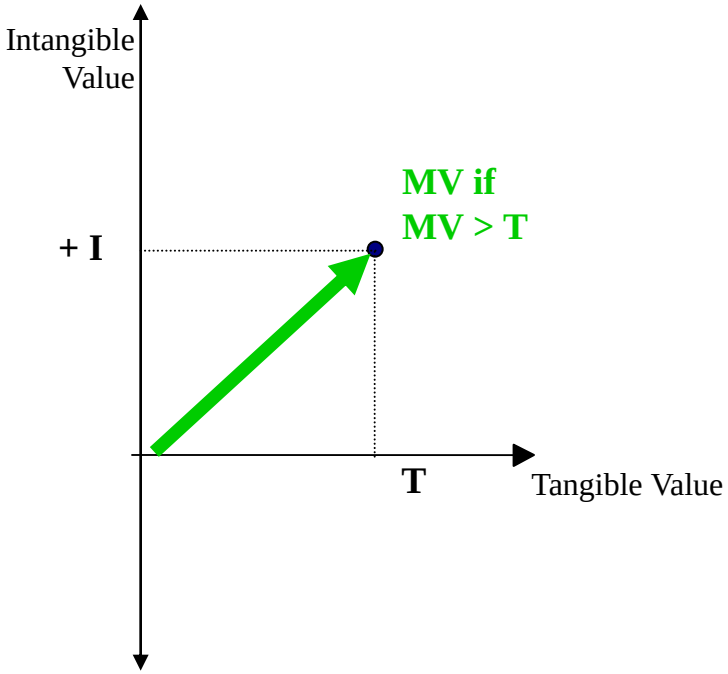
MV and T are known, the unknown value is I
We can calculate it:

$$I^2 = MV^2 - T^2$$

$$+/- I = \sqrt{|MV^2 - T^2|}$$

*If MV > T, then I is positive*
*If MV < T, then I is negative*

# The Intangible Value is positive when the Market Value is higher than the Tangible Value



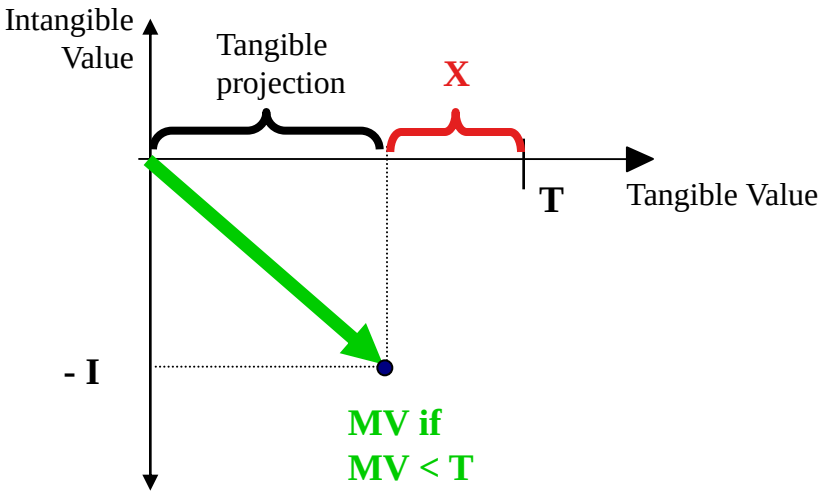

**The Intangible Value can be positive**

**If MV > T, then I is positive**

Example:
MV = 10 T = 8

$I = \sqrt{|10^2 - 8^2|} = \sqrt{36} =$ **6 positive**

# The Intangible Value is negative when the Market Value is less than the Tangible Value




**The Intangible Value can be negative**

**If MV < T, then I is negative**

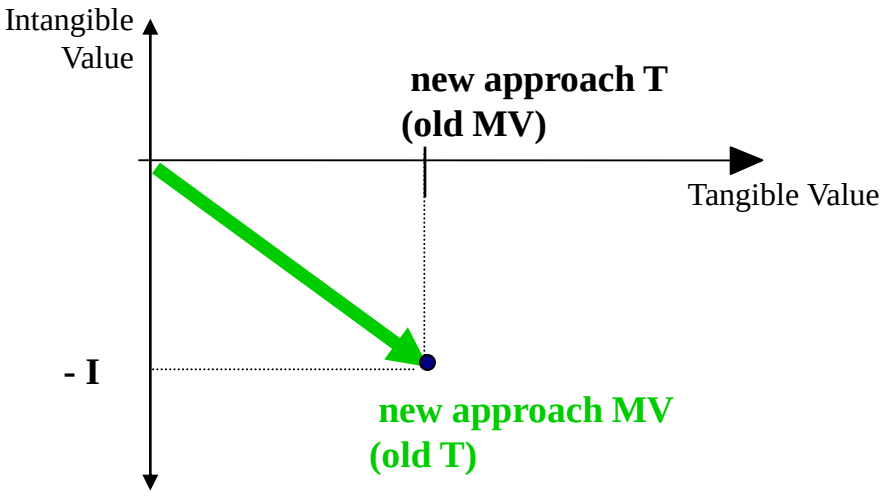
Example:
MV = 8 T = 10

The MV is composed of a **„Tangible projection“** Value and Intangible Value.

The „Difference **X**“ between the Tangible Value T and the „Tangible projection“ of the MV is due to the „incorrect“ calculation of the Tangible Value (e.g. Balance):

- resources were not appropriately used?
- the Tangible Value contains „evaluated active positions“ like shares of other companies?
- other reasons?

# The Intangible Value is negative when the Market Value is less than the Tangible Value




**If MV < T, then I is negative**

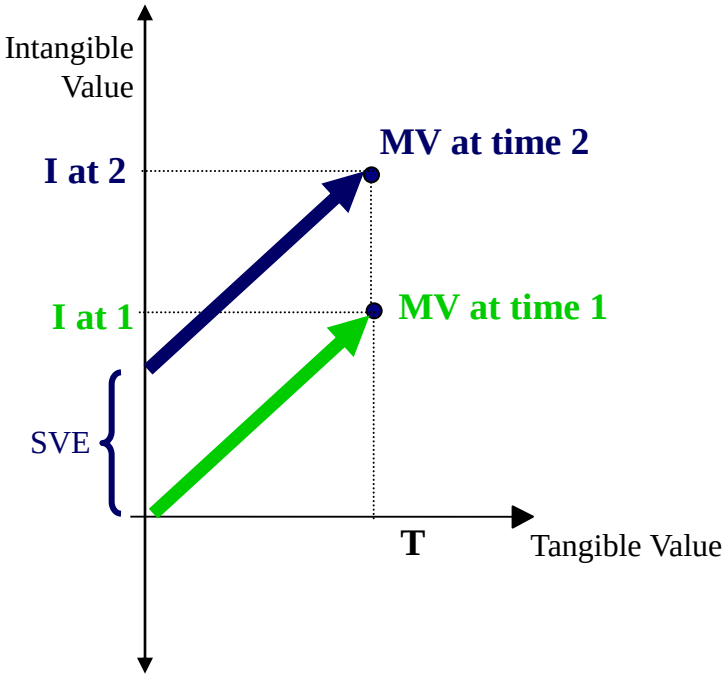
**This case shows an unusual and very critical situation. It needs to be approched differently.**

In this case it is neither possible to calculate the Intangible Value nor the „Tangible Projection“ of the MV using the Pythagoras theory (e.g. the approach for the positive value)

A **new „Approach“** could to be introduced, e.g. the Tangible value T (Balance sheet value) and the Market Value MV (given by the market) have to be switched.

The new „Approach“ allows the use of the Pythagoras rule: the Intangible can therefore be calculated.

# The total value of a company can grow while the Tangible Assets remain constant thanks to Shareholder Value Expectation




If the MV is changing very quickly while the T remains constant, it means that an Intangible Factor is influencing the Total Value. If there is no logical explanation for the increase (e.g. new patents) then the MV increase is due to **SVE**

**The MV at time 1** is the sum of the Intangible and the Tangible Values (see previous formula)

**The MV at time 2** is the sum of the Intangible and the Tangible Values PLUS the Shareholder Value Expectation as an *Absolute* value (not vector), **purely intangible.**

$$1° I = \sqrt{1° MV^2 - T^2}$$

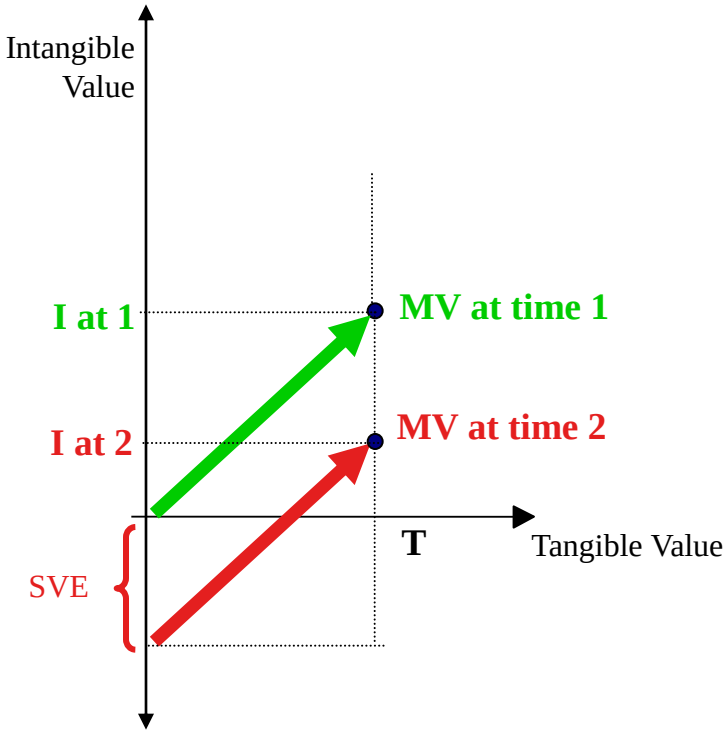
$$2° I = \sqrt{2° MV^2 - T^2}$$

*The new increased MV is the result of the SVE*

$$2° MV = \sqrt{1° MV + SVE}$$

$$SVE = 2° MV - 1° MV$$

# Shareholder Value Expectation can also cause a decrease of the Total Value of the company




**SVE** can also have a negative impact on the MV

**The MV at time 1** is the sum of the Intangible and the Tangible Values

**The MV at time 2** is the sum of the Intangible and the Tangible Values PLUS the Shareholder Value Expectation (in this case **NEGATIVE**) as an *Absolute* value, **purely intangible**.

$$1° I = \sqrt{1° MV^2 - T^2}$$

$$2° I = \sqrt{2° MV^2 - T^2}$$

*The new increased MV is the result of the SVE*

$$2° MV = \sqrt{1° MV + SVE}$$

$$SVE = 2° MV - 1° MV$$

In this case 2° MV < 1° MV therefore SVE has a negative impact