

bengin

Beyond Limits of Classic Business Paradigms

The Value Vector[©]

..Basics for Mapping Real Values.

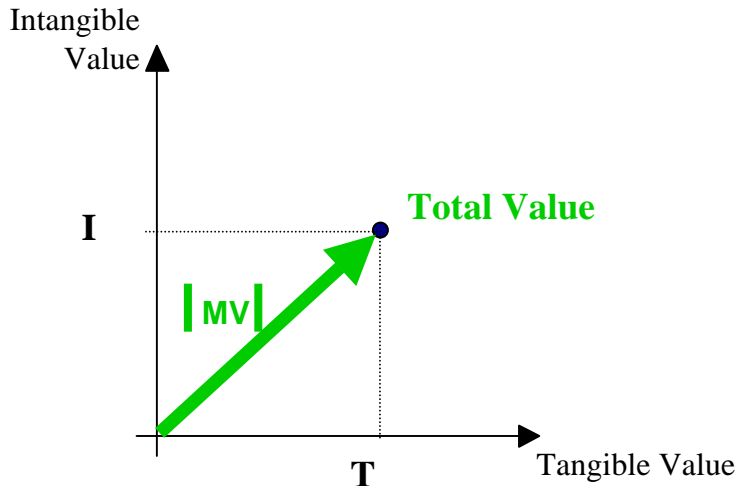
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The total value of a company is the sum of its Tangible and Intangible Assets



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:

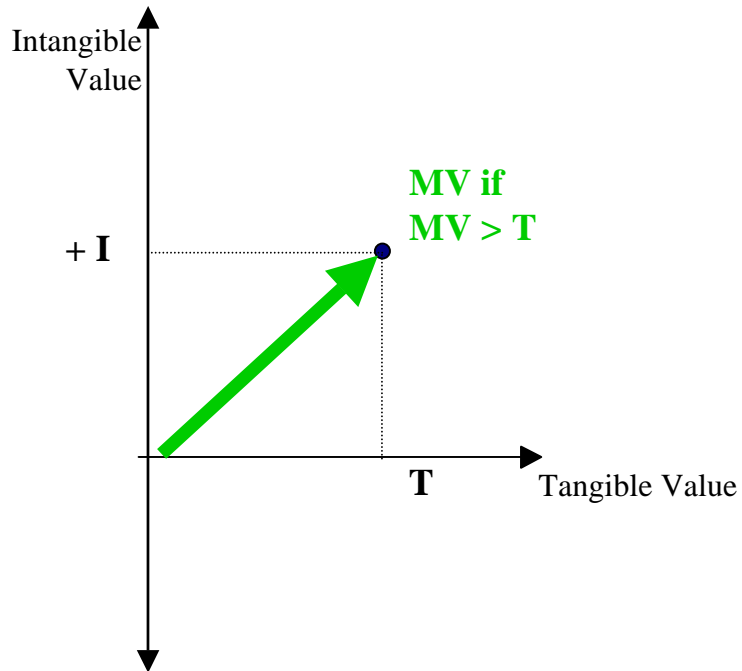
$$I^2 = MV^2 - T^2$$

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

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:

$$MV = 10 \quad T = 8$$

$$I = \sqrt{|10^2 - 81|} = \sqrt{36} = 6 \text{ positive}$$

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

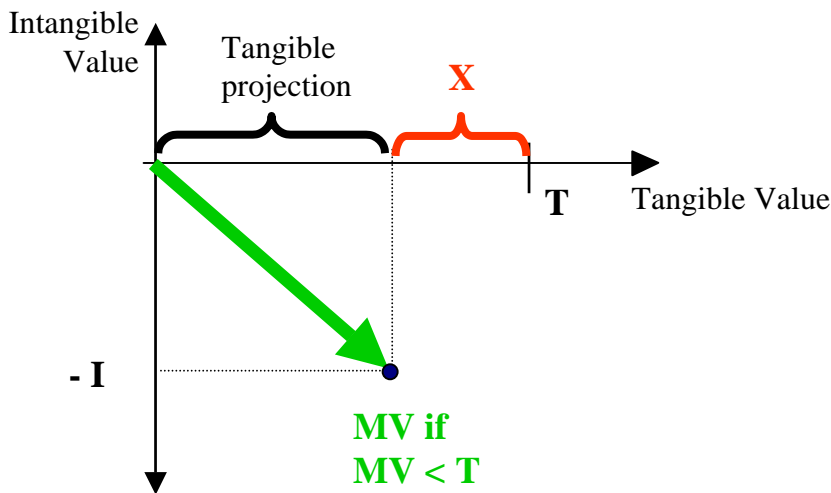
Example:

$$MV = 8 \quad T = 10$$

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

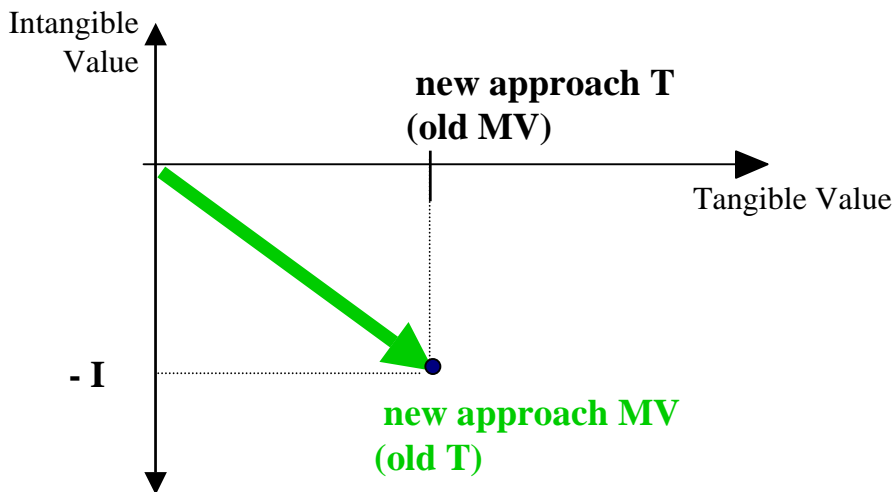
If $MV < T$, then I is negative

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

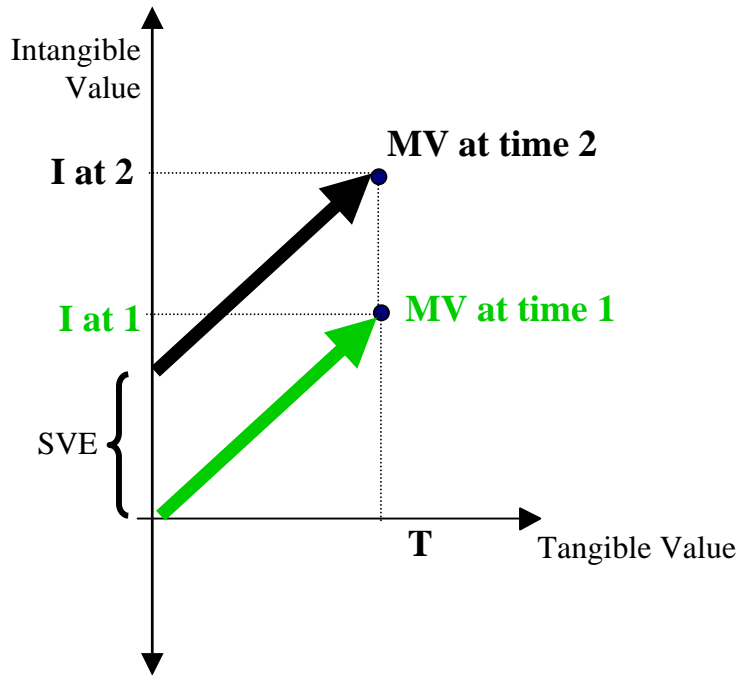
In this case it is neither possible to calculate the Intangible Value nor the „Tangible Projection“ of the MV using the Pythagoras theory (e.g. the approach for the positive value)

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**.

$$1^{\circ} I = \sqrt{1^{\circ} MV^2 - T^2}$$

$$2^{\circ} I = \sqrt{2^{\circ} MV^2 - T^2}$$

The new increased MV is the result of the SVE

$$2^{\circ} MV = \sqrt{1^{\circ} MV + SVE}$$

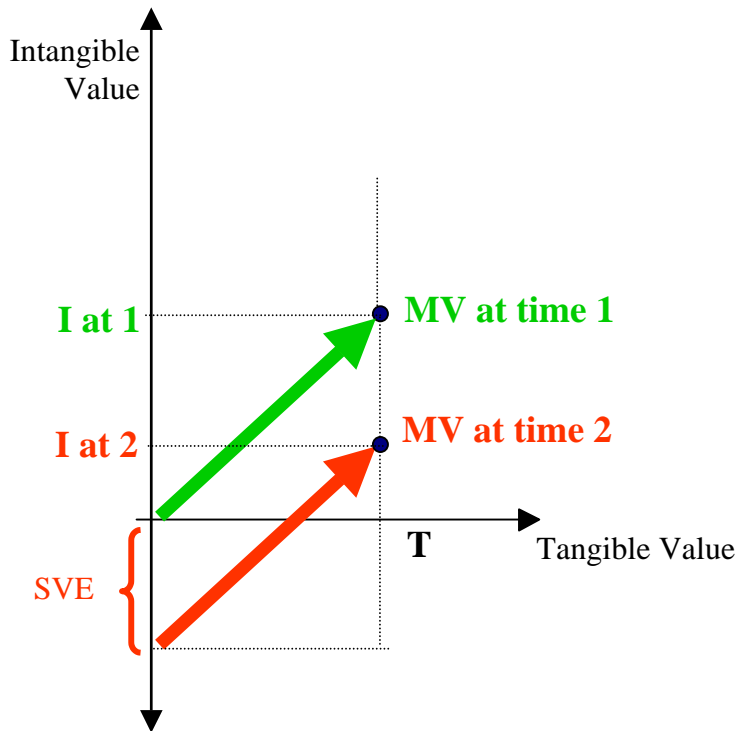
$$SVE = 2^{\circ} MV - 1^{\circ} MV$$

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**.



$$1^{\circ} I = \sqrt{1^{\circ} MV^2 - T^2}$$

$$2^{\circ} I = \sqrt{2^{\circ} MV^2 - T^2}$$

The new increased MV is the result of the SVE

$$2^{\circ} MV = \sqrt{1^{\circ} MV + SVE}$$

$$SVE = 2^{\circ} MV - 1^{\circ} MV$$

In this case $2^{\circ} MV < 1^{\circ} MV$ therefore SVE has a negative impact

Anybody is invited to use the extended Value Proposition:
Following Offerings are available.....

Products Documents, Templates, Checklists...
Software (Basics and Special Modules)

Services Consulting, coaching, education,
assistance, support

Licenses for: Enduser,
Consultants (internal/external),
Teacher,
Developer
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Where you may find us.

- Root-Service AG
Weinfelderstrasse 32
8575 Bürglen
- Institute for Business Development
To be determined
- Ingenieurbüro für Wirtschaftsentwicklung
Alpsteinstrasse 4
9034 Eggersriet

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Company	Name	Products		Services			Licenses				
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Andersen	NN	X	(X)		X	X	X	X			
BSG	Ruedi Kaufmann	X	(X)		X	X	X	X			
GCI	Adolf Dörig	X	(X)		X	X	X	X			
Root Service	Roger Gartenmann		X		X						
Ingenieurbüro für Wirtschaftsentwicklung	Peter Bretscher	X	(X)	X	X	X	X	X	X	X	X
Ensslin Consulting	Ernst Ensslin	X	(X)	X	X						
bengin.com	Info	X	(X)	X	X	X	X	X	X	X	X
Wolfsberg	PG	X		X			X	X			

Balanced Scoremap[©]

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