

# VALUETRUST

## Pay for performance – What is performance?

**Prof. Dr. Christian Aders**

Munich, January 7, 2020

# Pay for performance – What is performance?

## THE WALL STREET JOURNAL.

Home World U.S. Politics Economy Business Tech **Markets** Opinion Arts Life Real Estate

MARKETS

### The Hottest Metric in Finance: ROIC

General Motors placated activist investors with help of return on invested capital

By **DAVID BENOIT**

Updated May 3, 2016 3:45 p.m. ET

Last year, **General Motors Co.** fended off a group of activist investors with the help of an esoteric financial metric to which it had previously paid little heed.

The century-old auto maker began publicly touting the statistic, known as return on invested capital, or ROIC. It tied compensation to a 20% target and said that above a \$20 billion cushion, cash it couldn't earn that return on would be handed back to shareholders.

# Agenda

## Table of content

---

1. Basic principle of performance measurement and compensation
2. Performance from the shareholders' perspective
3. Performance from the management's perspective
4. Value-based performance measurement on the basis of value/book value based target returns

**ValueTrust Financial Advisors SE**

Theresienstraße 1  
80333 Munich  
Germany

[www.value-trust.com](http://www.value-trust.com)

# 1 Basic principle of performance measurement and compensation

# Basic principle of performance measurement and compensation – theory

The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2001 was awarded jointly to George A. Akerlof, A. Michael Spence and Joseph E. Stiglitz "for their analyses of markets with asymmetric information".



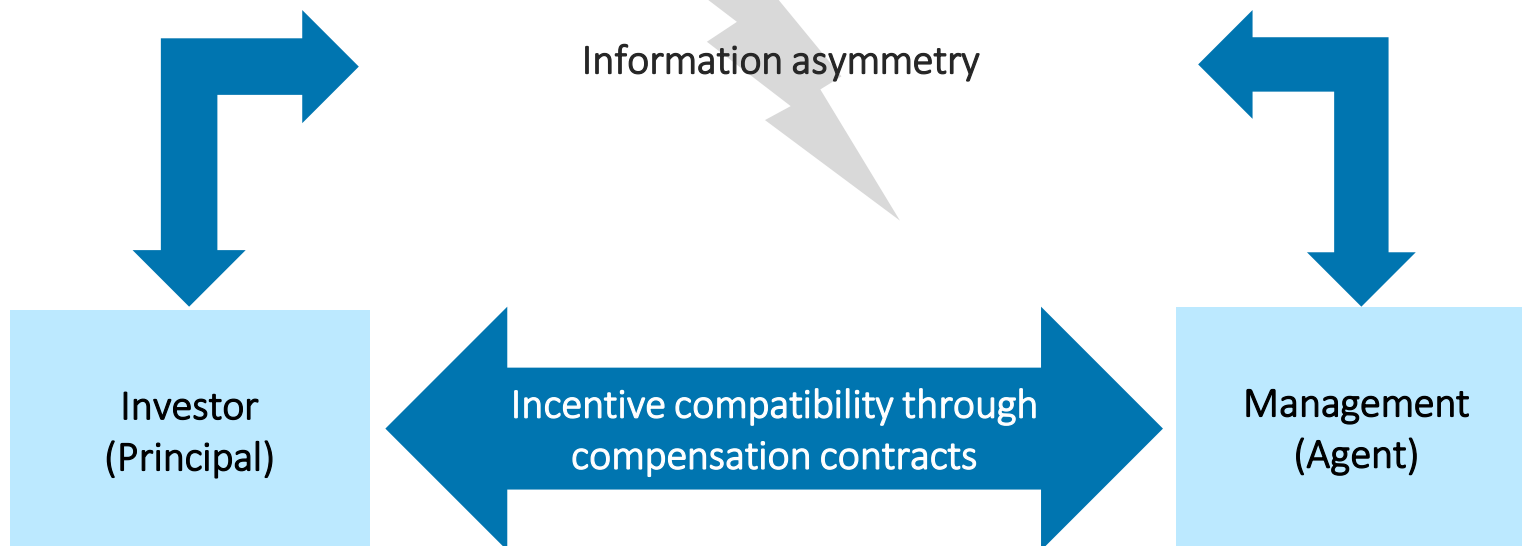
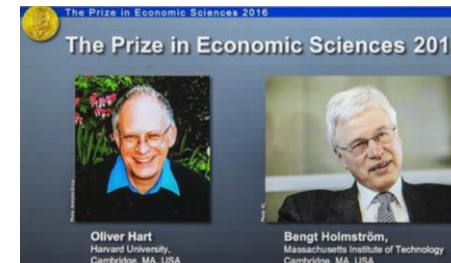
George A. Akerlof  
USA



A. Michael Spence  
USA



Joseph E. Stiglitz  
USA



## Conclusion

- Reduction of the Principal-Agent dilemma and creation of incentive compatibility between investors and management through compensation contracts

## Basic principle of performance measurement and compensation – common practice

„Human beings adjust behavior based on the metrics they're held against. Anything you measure will impel a person to optimize his score on that metric. What you measure is what you'll get.“



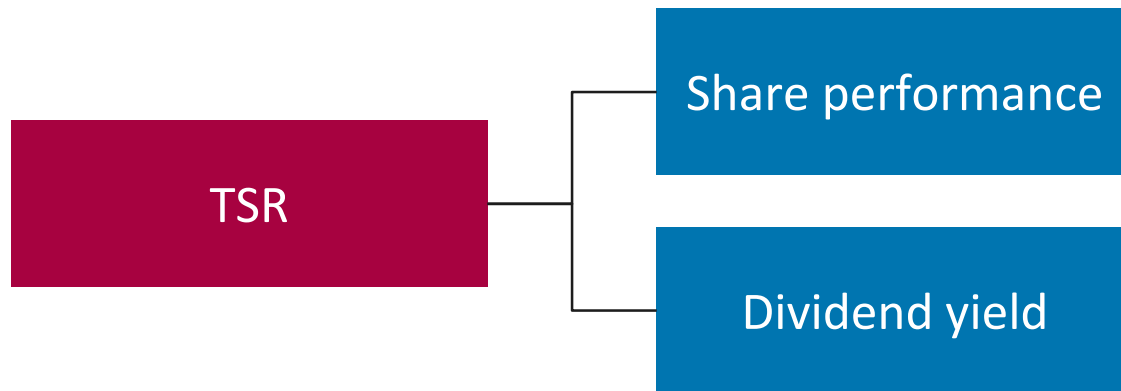
### Conclusion

- What is performance from the perspective of the shareholders?
- What is performance from the perspective of the management?

## 2 Performance from the shareholders' perspective

Shareholders measure the performance of their investment resp. of the company by means of the Total Shareholder Return (TSR)

$$\text{TSR} = \frac{(\text{Closing stock price} - \text{Opening stock price}) + \text{Dividends}}{\text{Opening stock price}}$$

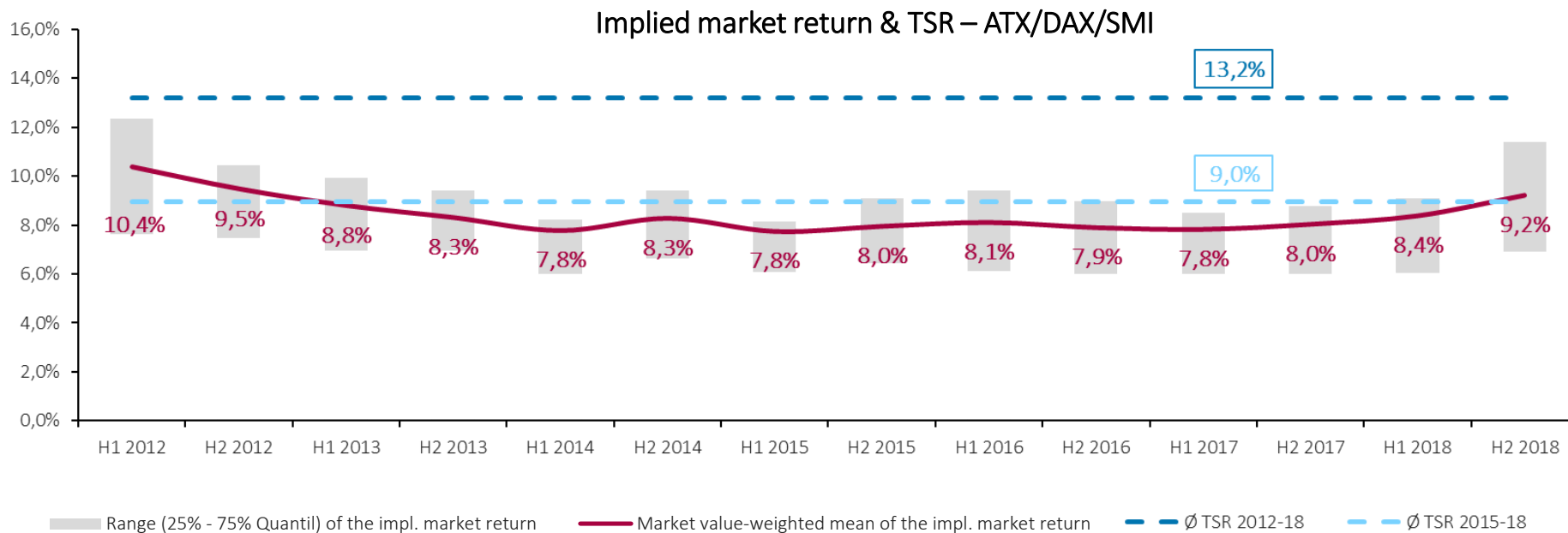


#### Conclusion

- For the assessment of the actual performance, the TSR must be evaluated in relation to the actual performance of the benchmark and the planned performance



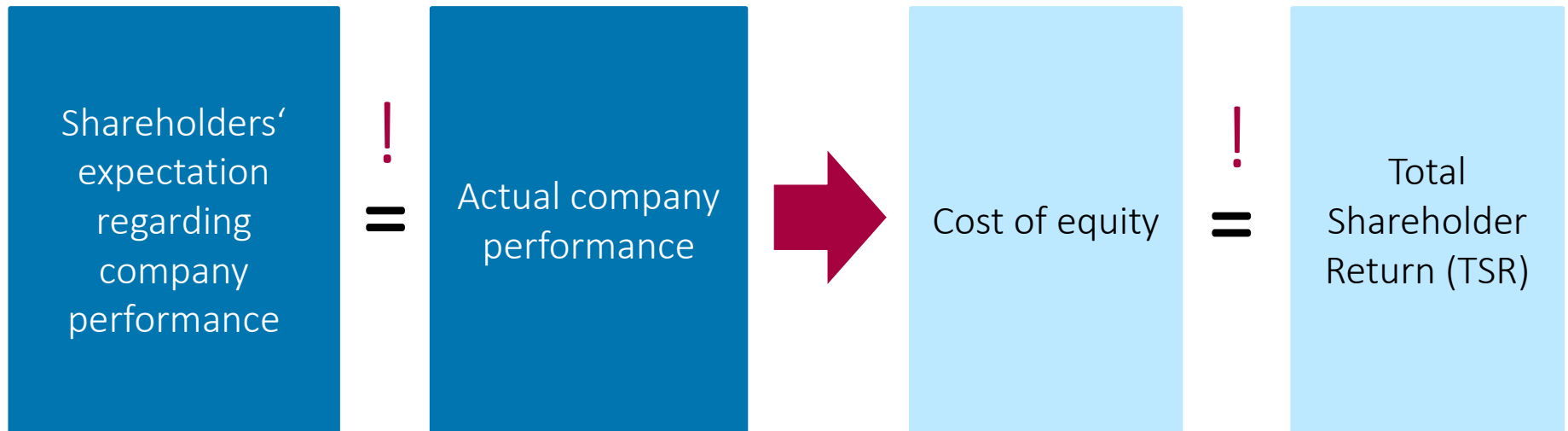
# Plan/actual performance of the benchmark using the capital markets of the DACH region as an example



## Conclusion

- The ATX/DAX/SMI companies realized an average TSR of about 9.0% in the last 4 years
- The implied cost of equity (= expected TSR), derivable from the stock prices and net income estimates, currently amount to about 9.2% for the ATX/DAX/SMI

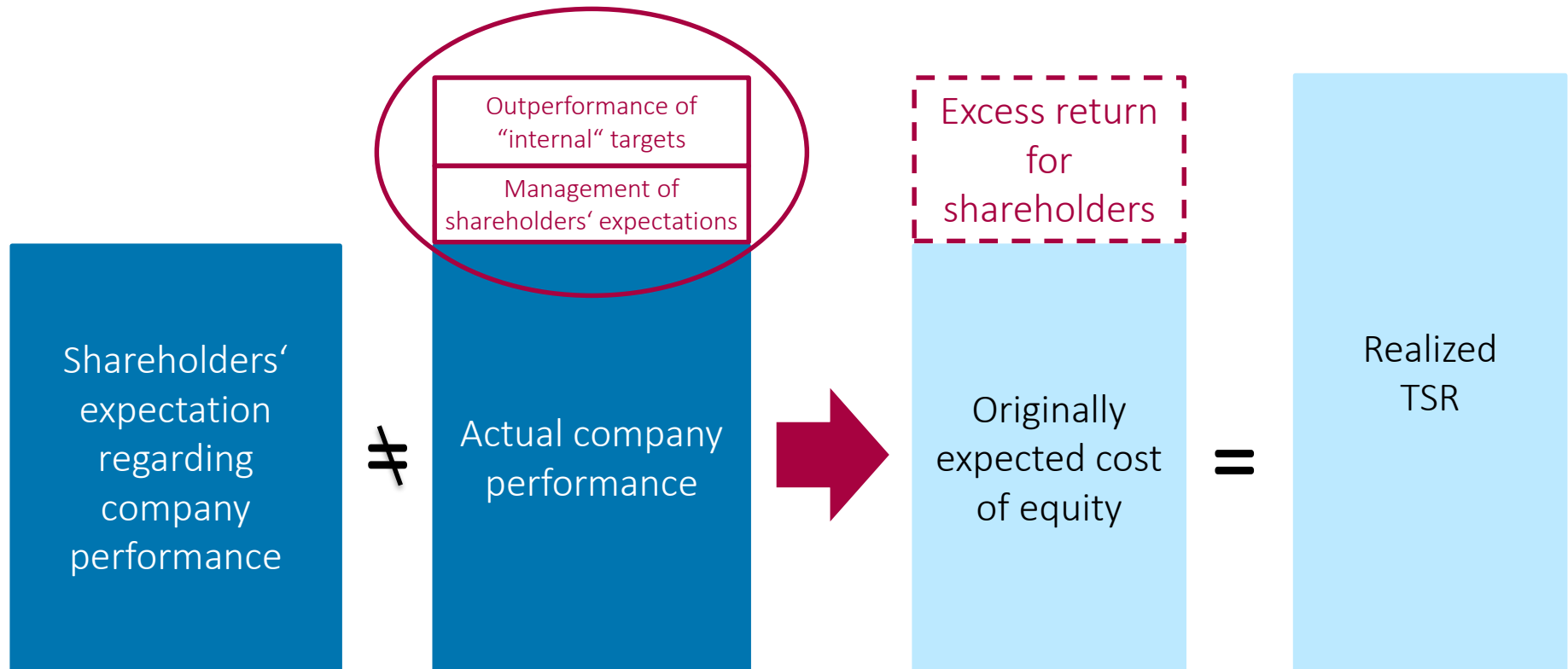
If the shareholders' expectation, which is included in the stock price, are met, the actual performance equals the cost of equity resp. the expected TSR



#### Question

- How can the shareholders' performance expectations be exceeded?

# Outperformance from the shareholders' perspective is „Under promise and/or Over perform“ from the perspective of the management



## Conclusion

- In order to generate excess return for the shareholders, management must exceed the shareholders' expectations
- If this leads to an adjustment of the shareholders' expectation (and share performance), the „Expectations Treadmill“ will start

# The Expectations Treadmill is difficult to beat in the long term and can lead to disincentives



„If the company beats expectations, and if the market believes the improvement is sustainable, the company’s stock price goes up, in essence capitalizing the future value of this incremental improvement. This improves TSR.

But it also means that managers have to run even faster just to maintain the new stock price, let alone improve it further: the speed of the treadmill quickens as performance improves.“\*

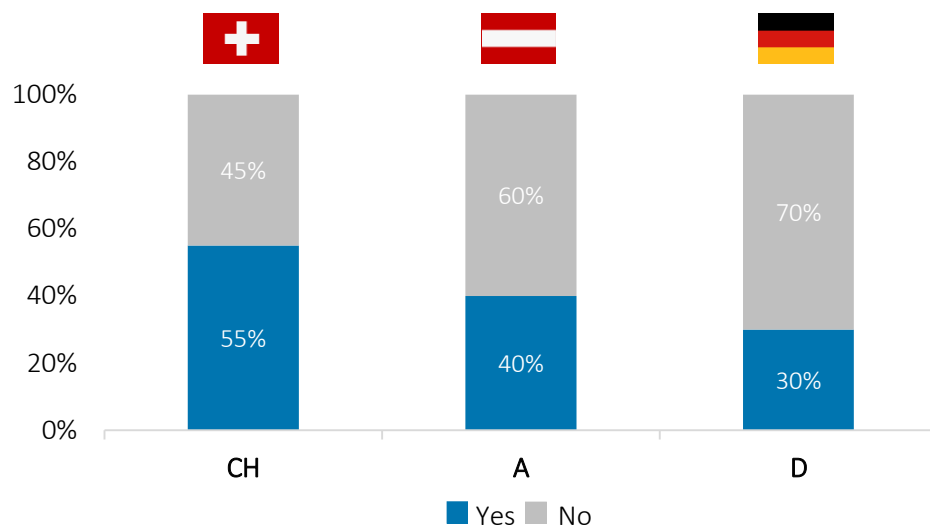
## Conclusion

- For every performance enhancement, which will be priced in the current stock price, management has „to run even faster“, in order to achieve additional excess return (Expectations Treadmill)

\* Source: Koller / Goedhart / Wessels: Valuation (2015), p. 50 f.

# After all, the ex post realized TSR is frequently used in practice as KPI for the management compensation (example DACH region)

## TSR as compensation indicator in the DACH region (SMI/ATX/DAX)



- In the SMI the TSR is applied on 55% of the 20 companies within the scope of a compensation program. A peer group comparison is mainly used
- The TSR is integrated in a compensation program for 8 of the 20 ATX companies (40%). For 5 companies a relative performance measurement featuring a peer group as benchmark is used. For two companies a index is used as a benchmark\*
- 30% of the 30 DAX companies have integrated the TSR in a management compensation program

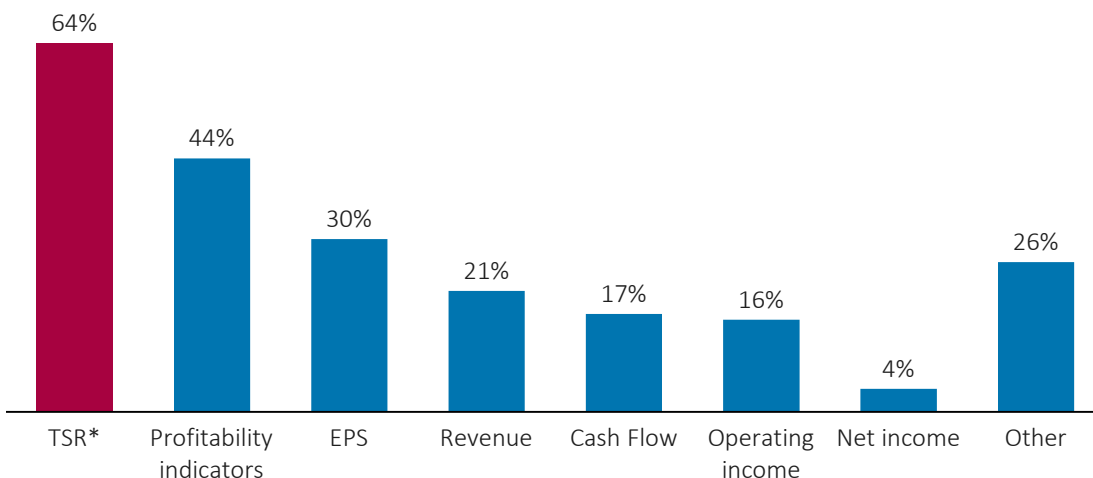
## TSR as performance indicator in the DACH region (SMI/ATX/DAX)

- No explicit TSR target (neither absolute nor relative) is used by the companies in the DACH region
- Between 10% (DAX) up to 30% (SMI) of the companies report the TSR as performance indicator

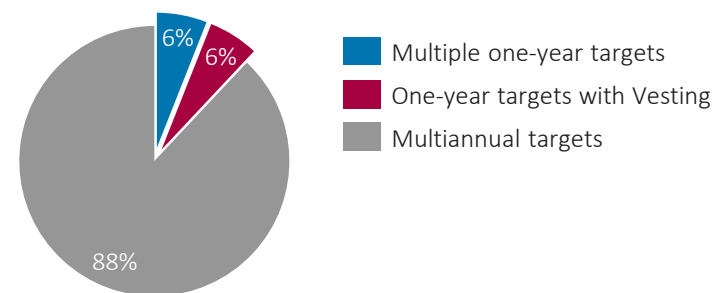
# In the US the TSR is currently the dominant indicator for the management compensation

## Meridian Corporate Governance & Incentive Design Study 2018

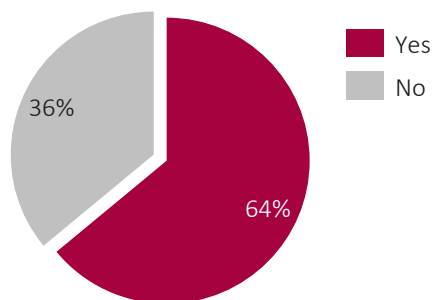
Applied compensation indicators in US companies



Target setting



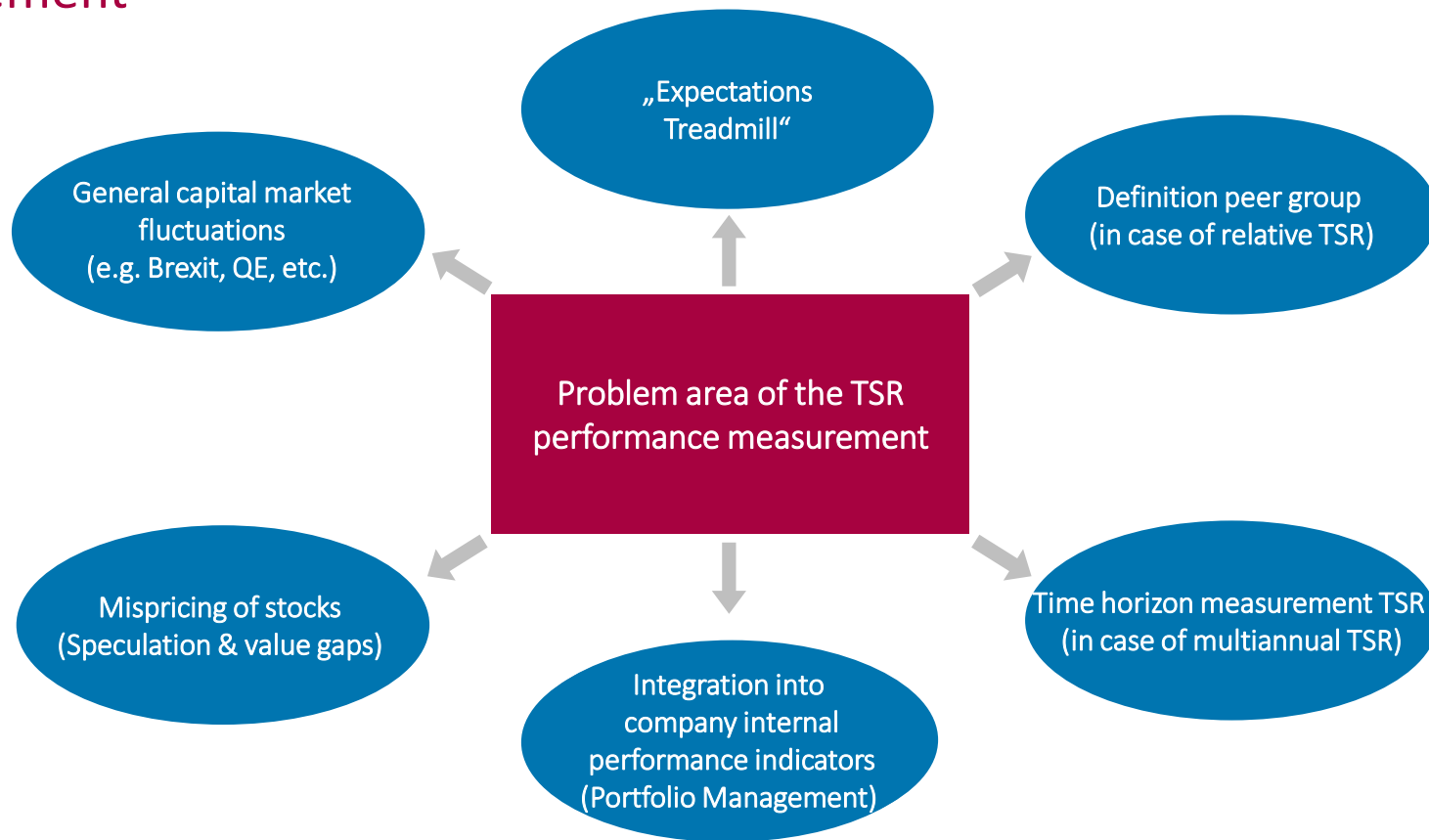
Usage of the relative TSR in US companies



- 200 listed US companies („Meridian 200“) were examined
- For the performance measurement by means of the relative TSR either a market index or a peer group comparison is used as a reference
- If the TSR is used, it is the sole performance indicator in 18% of the cases and it is used parallel to several performance indicators in 82% of the cases

\* Absolute and relative TSR

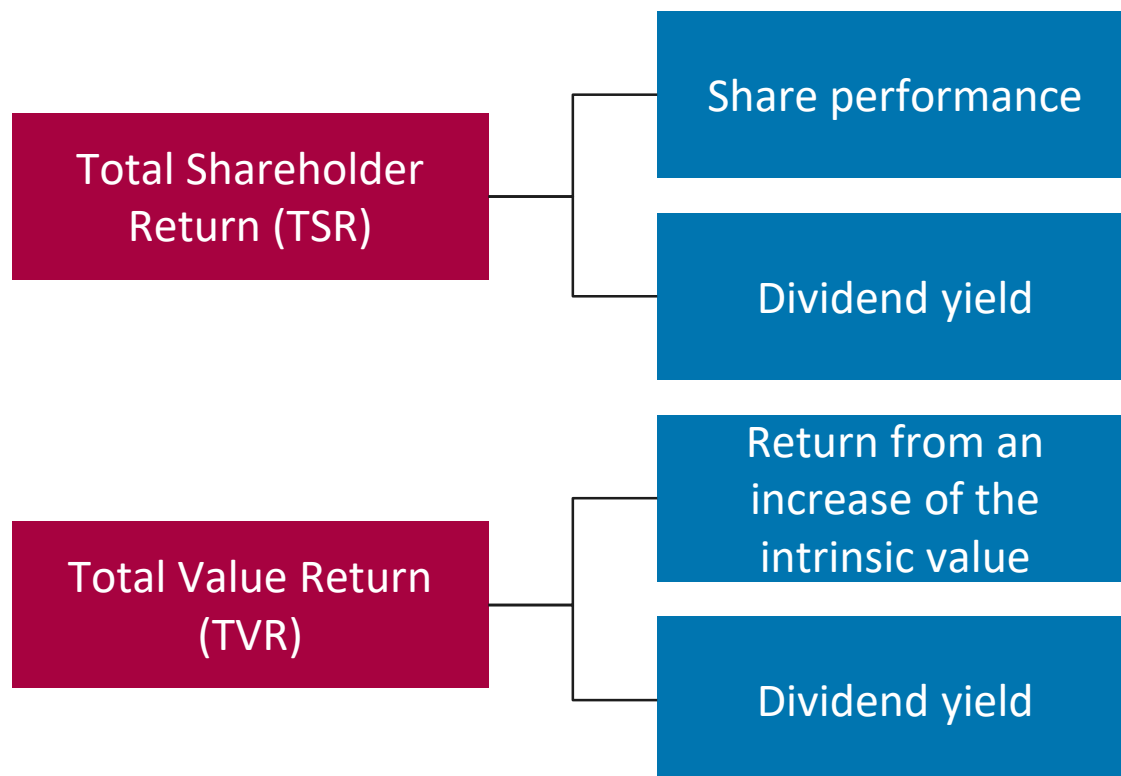
# The TSR correctly measures the performance from the shareholders' perspective but is problematic for the performance measurement of the management



## Conclusion

- The usage of the TSR as sole indicator for the performance measurement is not advisable
- The TSR is in particular relevant for the development of targets resp. „Stretch Targets“ for value optimizing corporate planning

Performance from the shareholders' perspective (TSR) and from the management's perspective (TVR) have to be differentiated initially and only randomly match



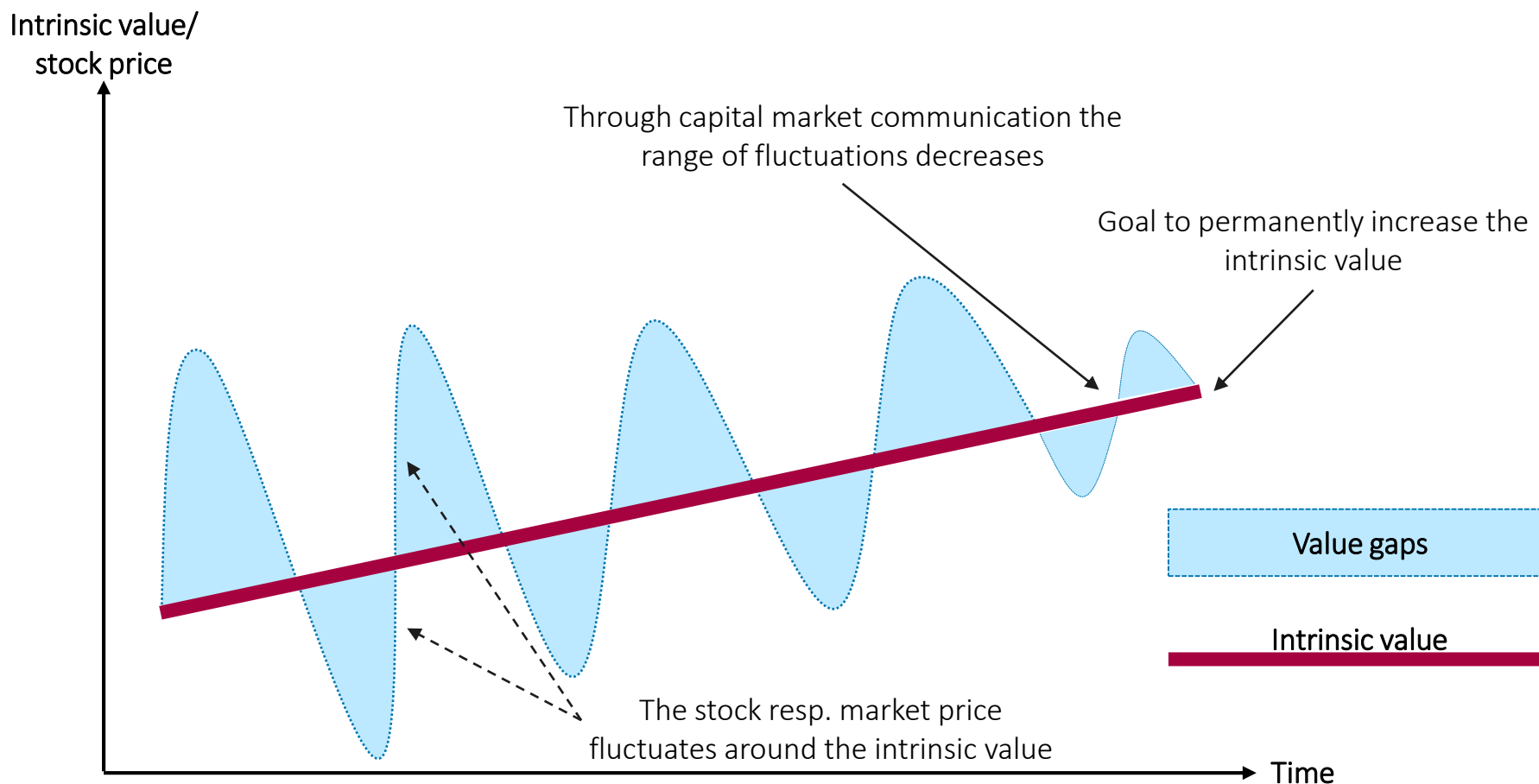
## Conclusion

- The Total Shareholder Return (TSR) illustrates the return that is achieved on the market capitalization from the shareholders' perspective
- The Total Value Return (TVR) computes the periodic return on the intrinsic enterprise value from the perspective of the management



## 3 Performance from the management's perspective

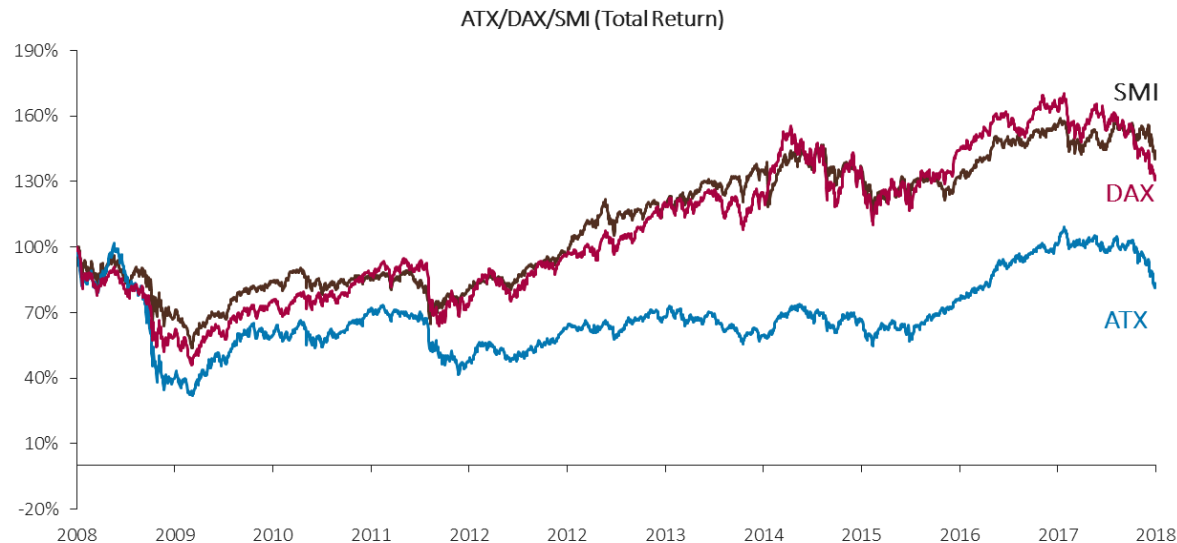
# Performance from the perspective of the company aims at sustainable increase of the intrinsic value and closure of value gaps



## Conclusion

- To increase the market valuation through the stock market resp. the stock price is, a sustainable growth of the intrinsic enterprise value is necessary which requires value optimizing business planning

# Value optimizing planning und target setting requires the analysis of the value drivers implied in the current market valuation



## Fundamental value drivers

Return on Equity/Capital  
(ROE / ROIC / ROCE)

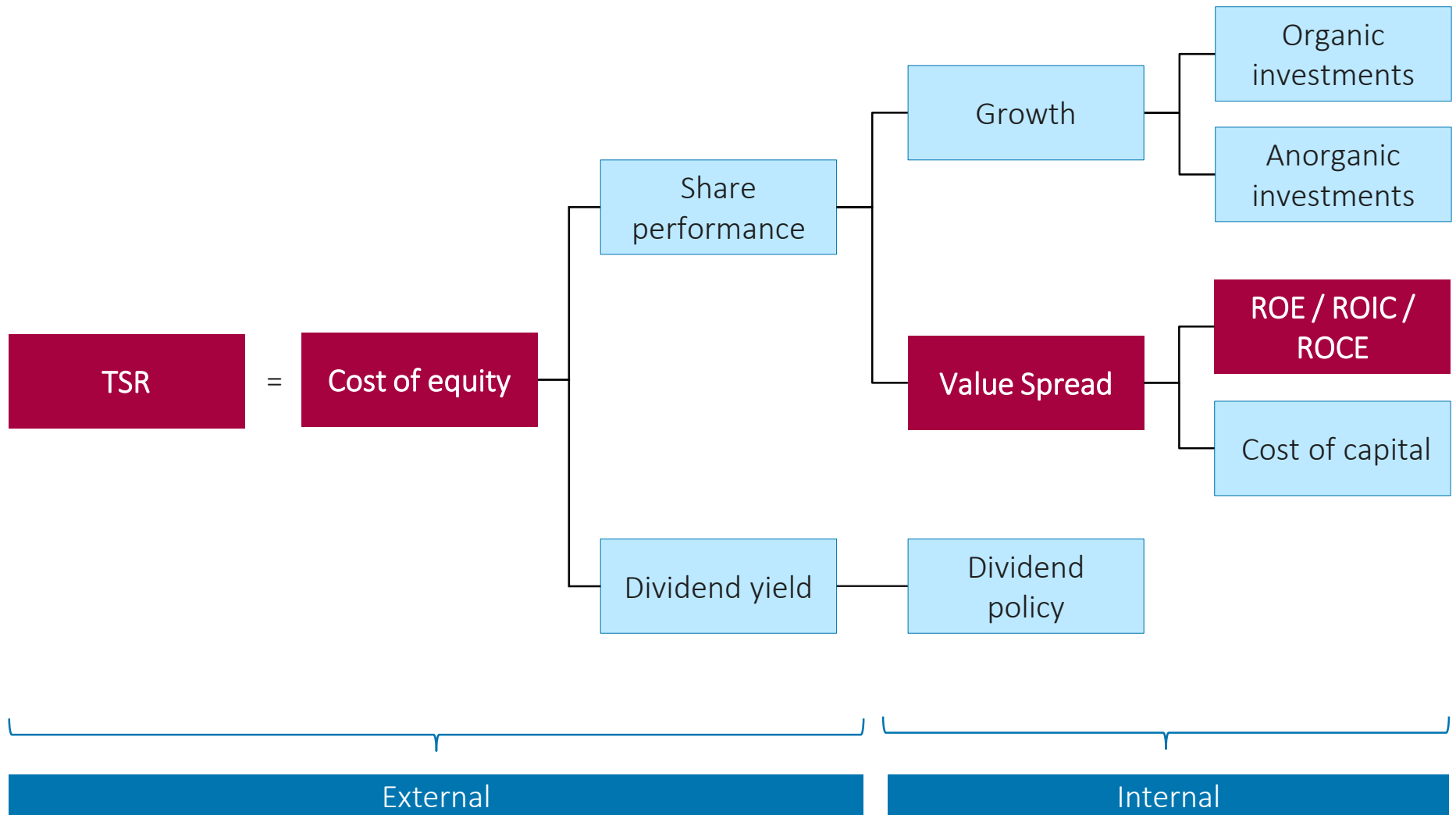
Growth

Excess return (Value Spread)

### Conclusion

- The company strategy, the TSR expectations of the shareholders and the performance of the competitors resp. of the peer group determine whether there is potential for value enhancement the company

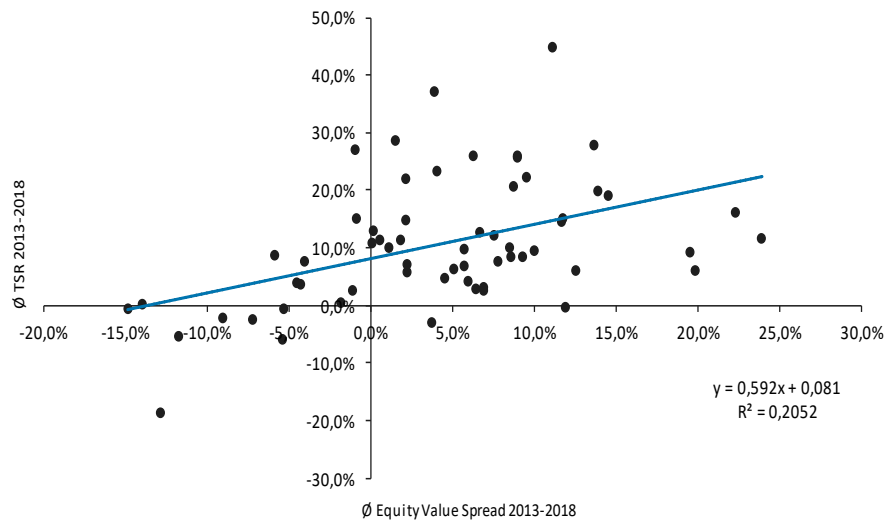
Analytically the TSR and the value drivers cost of equity, value spread and equity/capital return (ROE, ROIC und ROCE) correlate functionally and link shareholder (external) and company (internal) perspective



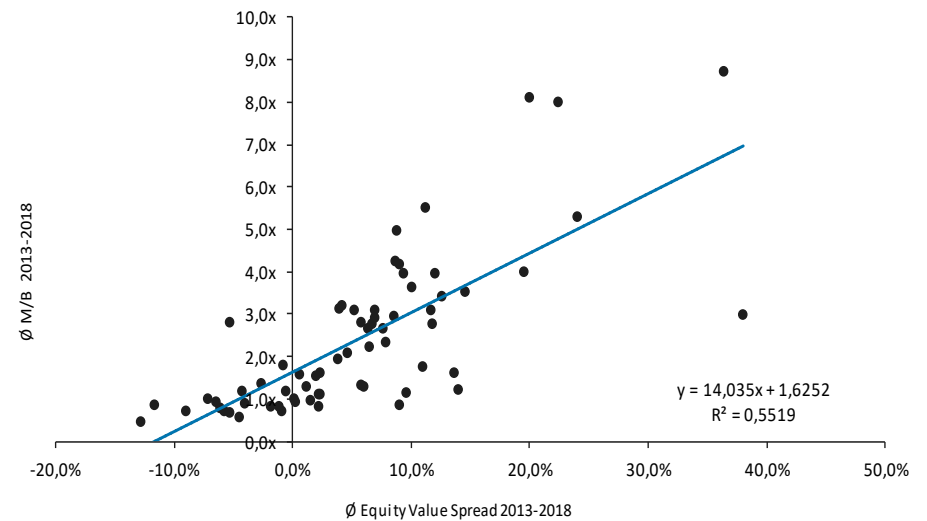
# Positive correlations can be verified also empirically between TSR resp. market-to-book-ratio and value spread for the capital markets of the DACH region

ValueTrust analysis

## Equity Value Spread vs. TSR



## Equity Value Spread vs. M/B

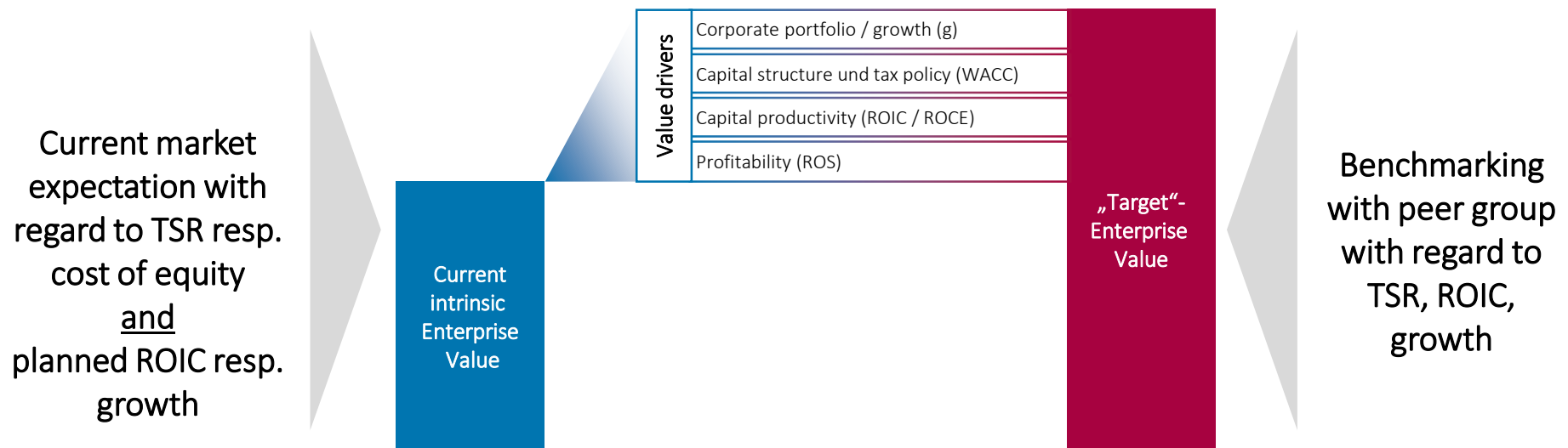


### Conclusion

- TSR and equity return benchmarking with the „Best Practice“ peer group is necessary

Note: ValueTrust analysis.

# TSR and peer group benchmarking is necessary for the validation of the ambitions of the business plan („Stretch Target“)



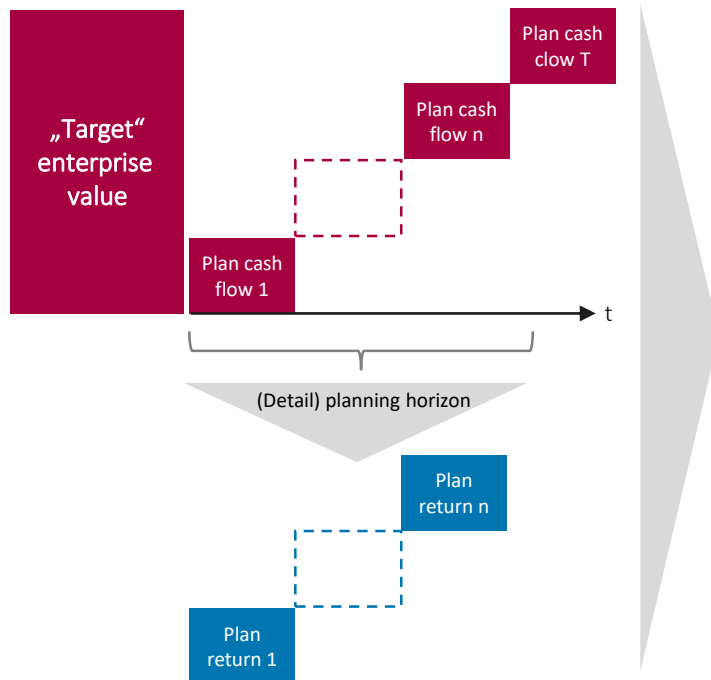
## Conclusion

- The reconciliation of the current market valuation with the strategy resp. planning of the management and with the performance of the competitors allows to question the feasibility and ambition of the company planning

- 4 Value-based performance measurement on the basis of value/book value based target returns

# Value optimizing performance measurement links shareholder and management perspective

Planned figures derived from value optimizing planning include TSR expectations



Performance measurement of equity returns on the basis of plan/actual comparison and through benchmarking with a „risk equivalent“ peer group is a robust and incentive compatible approach\*

		<b>Performance measurement</b>	
Plan return	<b>vs.</b>	Actual return <b>company</b>	
		<b>vs.</b>	Actual return <b>peer group</b>

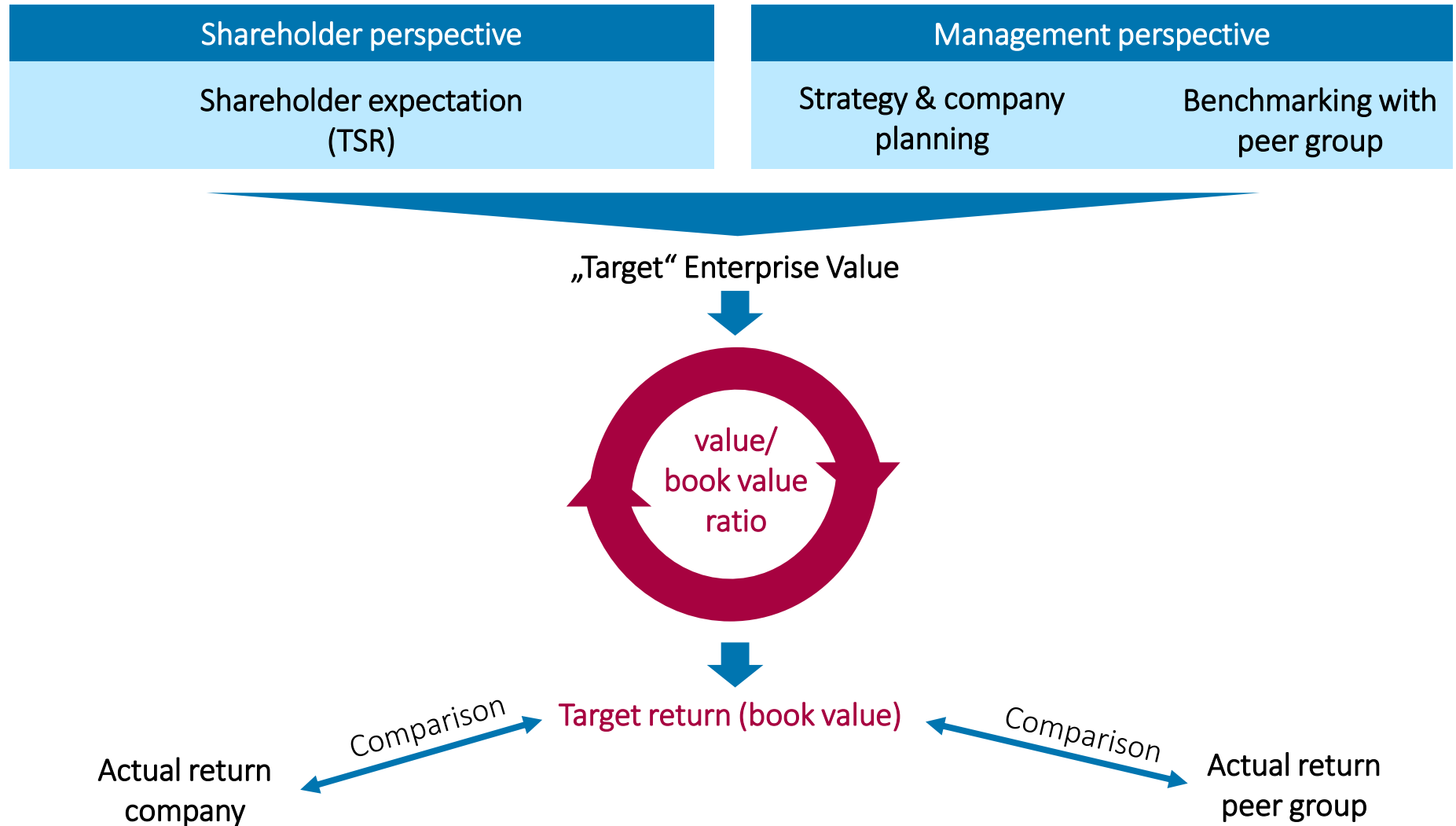
## Conclusion

- Attaching the performance measurement solely to the plan/actual comparison, neglects unexpected environmental influences and incentivizes conservative planning („Gaming“)
- Relative performance measurement in comparison to the risk equivalent peer group can reduce the impact of unexpected and uncontrollable environmental developments

\* Source: Velthuis / Wesner: Value Based Management (2005), S. 77 f.



# The value/book value ratio is the transmission mechanism between shareholder and management perspective



# The „target“ value/book value ratio determines the target return

Shareholder perspective

Management perspective

$$\underbrace{\frac{\text{Target market value}}{\text{Book value}}}_{\text{Price/book value ratio}} \stackrel{!}{=} \underbrace{\frac{\text{„Target“ Enterprise Value}}{\text{Book value}}}_{\text{Value/book value ratio}} = \underbrace{\frac{\text{Target return}}{\text{Cost of capital}}}_{\text{„Target“ value spread*}}$$

## Conclusion

- Value optimizing target setting and performance measurement manifests in the setting of target returns on the basis of an intrinsic „target“ enterprise value
- In order to close value gaps resp. undervaluation the value/book value ratio and the market(price)/book value ratio have to converge

\* Simplified without growth in the terminal value model

# VALUE TRUST

Discover our unique profile:

[www.value-trust.com](http://www.value-trust.com)

**Contact:**

**Prof. Dr. Christian Aders**

Senior Managing Director

*P:* +49 89 388 790 100

*M:* +49 172 850 4839

christian.aders@value-trust.com