

Value Based Management

1. Main Fields of Application, Instruments & Requirements of Value Based Management

Professor Dr. Louis Velthuis
Chair of Management Accounting
Johannes Gutenberg-Universität Mainz

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Important information and tenders

Important announcements and messages for all our students are published on the newsboard of our homepage:

- Announcements from practice lecturers
- Important deadlines & news
- ...

Attention: Cancellations or changes of the consultation hours are **NOT** announced on the newsboard. Instead, they are listed separately on our homepage under the heading „Sprechstunde – Aktuell“.

Important information about the lecture Value Based Management (Especially about short-term cancellation, dates for the exam review, etc.) receive all students who are registered for this lecture by mail to your Uni-Mail account. (This information will also NOT be published on the newsboard.) Please remember to check your emails regularly.

Basic Literature

- Velthuis, Louis/Wesner, Peter (2005): Value Based Management: Bewertung, Performancemessung und Managemententlohnung mit ERIC, Stuttgart.
- Young, S. David/O'Byrne, Stephen F. (2001): EVA and Value-Based Management: A Practical Guide to Implementation, New York et al.

Further Literature

- Further literature resources will be announced in the beginning of each lecture.

Course Time Schedule (1/2)

S 1	Lect.	Wednesday 10-12	TBD	Tut.	Wednesday 16-18	P 204	Tut.	Thursday 14-16
23. Okt 24	VBM 1	Main Fields of Application, Instruments & Requirements of Value Based Management	23. Okt 24			24. Okt 24		
30. Okt 24	VBM 2	Shareholder Value Approach and Maximizing Market Value	30. Okt 24	-	-	31. Okt 24	-	-
06. Nov 24	VBM 3	Traditional Performance Measures and their Limits	06. Nov 24	VBM 1 + 2	Exercise 1	07. Nov 24	VBM 1 + 2	Exercise 1
13. Nov 24	VBM 4	General Adequacy of Residual Income as a Performance Measure	13. Nov 24	VBM 3	Exercise 2	14. Nov 24	VBM 3	Exercise 2
20. Nov 24	VBM 5	Value Added Measures and Concepts: EVA	20. Nov 24	VBM 4	Exercise 3	21. Nov 24	VBM 4	Exercise 3
27. Nov 24	VBM 6	Value Added Measures and Concepts: CVA & ERIC	27. Nov 24	VBM 5	Exercise 4	28. Nov 24	VBM 5	Exercise 4
04. Dez 24	VBM 7	Importance and Limits of Adjustments	04. Dez 24	VBM 6	Exercise 5	05. Dez 24	VBM 6	Exercise 5
11. Dez 24	VBM 8	Determining the Cost of Capital	11. Dez 24	VBM 7	Exercise 6	12. Dez 24	VBM 7	Exercise 6
18. Dez 24	VBM 9	Risk-adjusted vs. Risk-free Costs of Capital as Hurdle Rates	18. Dez 24	-	-	19. Dez 24	-	-
25. Dez 24		semester break	25. Dez 24		semester break	26. Dez 24		semester break
01. Jan 25	01. Jan 25		02. Jan 25					

Course Time Schedule (2/2)

S 1	Lect.	Wednesday 10-12	TBD	Tut.	Wednesday 16-18	P 204	Tut.	Thursday 14-16
08. Jan 25	-	-	08. Jan 25	VBM 8	Exercise 7	09. Jan 25	VBM 8	Exercise 7
15. Jan 25	VBM 10	Management Compensation Schemes: Practice vs. Theory	15. Jan 25	VBM 9	Exercise 8	16. Jan 25	VBM 9	Exercise 8
22. Jan 25	VBM 10	Management Compensation Schemes: Practice vs. Theory	22. Jan 25		Corporate Lecture	23. Jan 25		Corporate Lecture
29. Jan 25	VBM 11	Implementing VBM, Value Drivers & Balanced Scorecard	29. Jan 25	VBM 10	Exercise 9	30. Jan 25	VBM 10	Exercise 9
05. Feb 25	-	-	05. Feb 25	-	-	06. Feb 25	-	-

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VBM – Course Structure

1. **Main Fields of Application, Instruments & Requirements of Value Based Management**
2. Shareholder Value Approach and Maximizing Market Value
3. Traditional Performance Measures and their Limits
4. General Adequacy of Residual Income as a Performance Measure
5. Value Added Measures and Concepts: EVA
6. Value Added Measures and Concepts: CVA & ERIC
7. Importance and Limits of Adjustments
8. Determining the Cost of Capital
9. Risk-adjusted vs. Risk-free Costs of Capital as Hurdle Rates
10. Management Compensation Schemes: Practice vs. Theory
11. Implementing VBM, Value Drivers & Balanced Scorecard

Overview

- 1 Introduction**
- 2 Value Based Management - Main Fields Application**
- 3 Value Based Figures**
- 4 Requirements and Principles of VBM**
- 5 Value Based Management - Overview**

1 Introduction

- The main fields (areas) in which Value Based Management (VBM) is applied will be discussed.
- An overview of Value Based Figures as the key instruments of VBM will be given.
- The key role of value added measures in the form of residual income will be illustrated.
- The central principle of shareholder value maximization and the requirements in VBM-fields, planning, performance measurement, management compensation and controlling business units is specified.

2 Value Based Management - Main Fields of Application

- **Value Based Management (Shareholder Value Management)**
Alignment of all management activities to the goal of increasing the (intrinsic) market value of the equity of the company (Shareholder Value).
- **Main Fields of Application**
Value Based Management incorporates a value-oriented integration of management control systems with respect to
 - Planning (ex ante valuation)
 - Performance Measurement (ex post control)
 - Management Compensation (incentives)
 - Controlling Business Units (coordinated control)
- **Value Based Management and Management Control Systems**
Alignment of internal control (esp. Accounting / Controlling) regarding its decision support and behavior control function to achieve value and value creation.

3 Value Based Figures

- **Value Based Figures as Key Instruments of VBM**

For value-oriented Planning, Performance Measurement, Management Compensation and Control of Business Units the problem evolves:

- How can value contributions be measured/assessed?
- Value Based Figures are used as key performance indicators to measure resp. to assess value contributions.

- **Value Based Figures: Overview**

Value Based Figures as performance measures can be divided in:

- Profitability Measures
- Value Added Measures
- Aggregated Measures

Value Based Figures - Overview (1/3)

- **Value-oriented Profitability Measures**

Profitability Measures (Ratios) are used to measure the *relative value contribution* in a period

- Return on Invested Capital (RoIC); Return on Net Assets (RoNA)
- Return on Capital Employed (ROCE); Cash Flow Return on Investment (CFRoI)

- **Value Added Measures**

Value Added Measures in the form of Residual Income are used to measure the *absolute value contribution in a period*

- Economic Value Added (EVA),
- Economic Profit (EP),
- Cash Value Added (CVA)
- Earnings less Riskfree Interest Charge (ERIC)

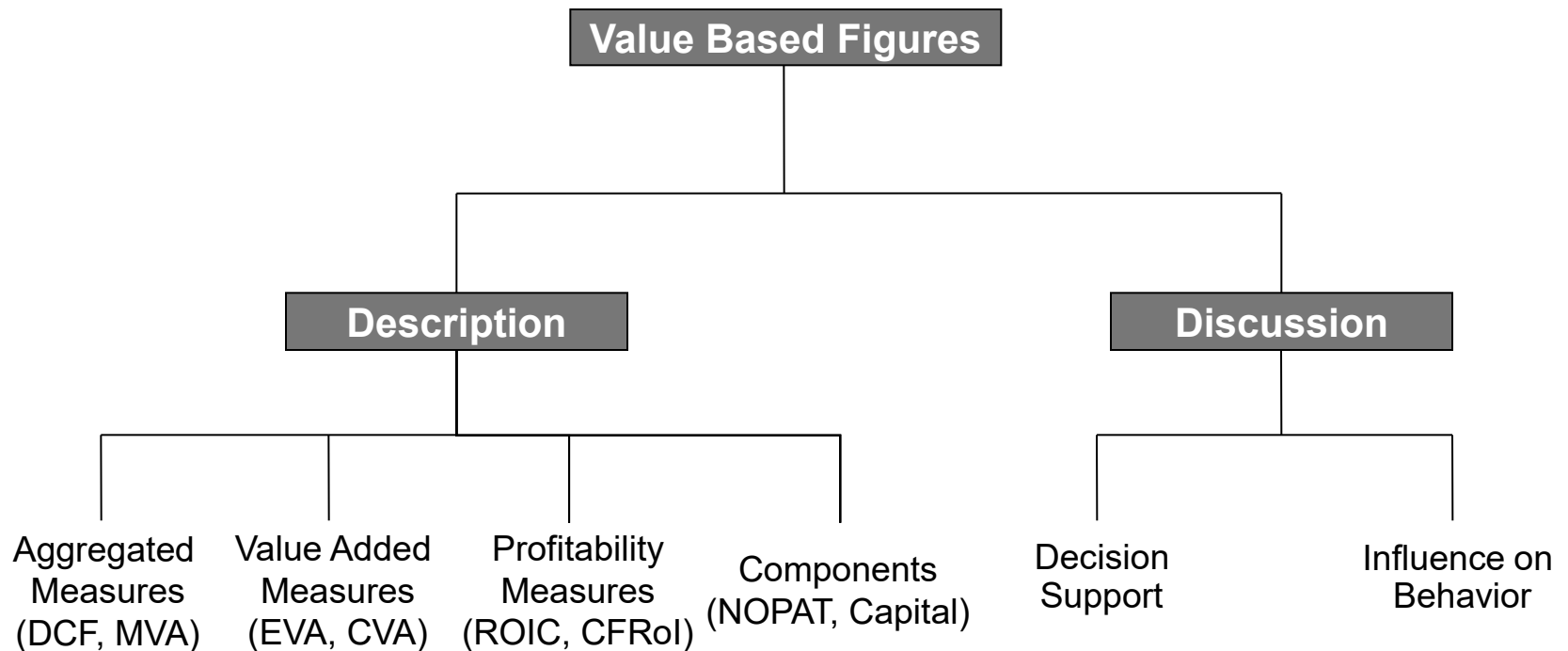
Value Based Figures - Overview (2/3)

- **Aggregated Measures**

Aggregated Measures are used to measure the whole *value contribution over all periods*

- Discounted Cashflow (DCF)
- Market Value Added (MVA)

Value Based Figures - Overview (3/3)



Key-Performance-Indicators in Practice

- **Value Added Measures used by the DAX 30-Companies**

→ More than 50% of the DAX 30-Companies used EVA or company specific EVA-like measures in 2018

Source: Company specific Annual Reports 2018

→ Shareholder Value-Management is prevalent!

→ Trend developed from traditional profitability measures to value added measures.

Key Figures and VBM-Concepts

- **Key Figures and Concepts**

Integrated value-oriented management control systems based on residual income (value added measures) as the key performance figure are prevalent in practice.

Concept & Key Figure
Economic Value Added
Economic Profit
Cash Value Added
ERIC

Value Added Measures – Introduction (1/2)

- **Key role of Value Added Measures and Calculation**

- Value Added Measures are by far the most important KPIs in SVM
- Value Added Measures are calculated as residual income (RI):

$$RI_t = P_t - k \cdot IC_{t-1}$$

- From accounting income (before interest) (P) a capital charge for the invested capital is subtracted.
- The capital charge is calculated by multiplying the cost of capital k with the invested capital (IC) at the beginning of the relevant period.

Value Added Measures – Introduction (2/2)

- **Value Added Measures and efficient controlling of invested capital**
 - Value Added Measures help control in all areas of Value Based Management for an efficient capital employment.
 - The capital charge serves in...
 - ... Planning
for an adequate valuation of the invested capital
 - ... Performance Measurement
for an internal and external control of invested capital and the costs
 - ... Management Compensation
for adequate incentives regarding the optimal investment of capital
 - ... Control of Business Units
for an efficient coordination of decentral capital investments.

4 Requirements and Principles of VBM

- **Central Requirement: Shareholder Value-Orientation**

All management activities should be aligned to the goal of the shareholders.

As such the relevant goal is to increase resp. to maximize the (intrinsic) market value (not the market price) of the equity of the company (Shareholder Value).

→ **Maximize Discounted value of future (free) cash flows (CF) a firm generates, i.e. present value:**

$$V_t = \sum_{\tau=t+1} \frac{CF_{\tau}}{(1+k)^{\tau}} \quad \text{with} \quad k=WACC$$

- **Requirement for VBM-Instruments: goal-consistency (goal-congruence)**

All instruments for managerial accounting should be in line, i.e. consistent to the goal of value maximization.

→ The requirement of shareholder value-orientation plays the role of an overriding principle.

Specification of the Principle of Shareholder Value-Orientation

- **Necessity of Concretization**
The general principle of shareholder-value orientation muss be specified for the different fields of application.
- **Specific requirements for the various fields of SV-Management**

Field	Requirement
Planning	NPV-Identity
Performance Measurement	Comparability
Management Compensation	Win-Win-Criteria
Controlling Business Units	Allocatability

Specific Requirement for Planning

- **Objective of value-oriented planning**
Realization of value-enhancing investments, rejection of value-decreasing investments
 - Valuation of investment projects must coincide with the valuation of the shareholder
 - **Requirement of NPV-identity**
i.e. Present value of the performance measure equals the (net) present value of the sum of the cash flows

Requirement for Performance Measurement

- **Objective of Performance Measurement**

Measurement of actual performance (attained value) as to control the achievement of companies, business units or investments

Asses the achievement (income) of a manager within a relative comparison to a benchmark

→ **Requirement Comparability**

Income measure should reflect, what has been really earned and the benchmark should reflect an adequate alternative interest yield

Specific Requirement for Management Compensation

- **Objective of management compensation**
Manager must have a financial incentive to make investment decisions which create value for the shareholders
- **Requirement: Win-Win-Criteria (incentive compatibility)**
The manager only gets a financial advantage (disadvantage) from the incentive scheme, if the shareholders get an advantage (disadvantage).

Goal of the manager (agent) is in line with the goal of the shareholders (principals) only

- if the bonus function (compensation function) is continuous, i.e. no caps and floors
- if the performance measure is goal-congruent.
- A performance (accounting) measure is only goal-congruent, if it fulfills the criteria of NPV-identity.

Requirement for Controlling Business Units

- **Objective of Controlling Business Units**

Business Units should be controlled to achieve value (creation).

→ **Requirement of Allocatability**

To measure resp. to assess value contributions of the various business units it is necessary to allocate income contributions and capital costs.

As such this enables value-oriented planning, performance measurement and management compensation on the business unit level.

5 Value Based Management - Overview

