

value engineering sample exam Academic PDF

Understanding the Value Engineering Sample Exam

Value engineering sample exam serves as an essential preparation tool for professionals aiming to excel in the field of value engineering. It provides a simulated environment to test knowledge, analytical skills, and application of value engineering principles. Through these sample exams, candidates can familiarize themselves with the exam format, identify key areas of importance, and develop strategies to improve their performance. Whether you are a novice seeking entry-level certification or an experienced professional pursuing advanced credentials, practicing with sample exams is a crucial step toward success.

The Importance of Practice in Value Engineering Certification

Enhancing Understanding of Core Concepts

Practice exams help reinforce fundamental concepts such as function analysis, cost optimization, and creative problem solving. By repeatedly engaging with sample questions, candidates deepen their understanding of the core principles that underpin value engineering.

Familiarity with Exam Format and Style

Value engineering exams often include multiple-choice questions, case studies, and scenario-based problems. Familiarity with these formats through sample exams reduces test anxiety and improves time management skills during the actual exam.

Identifying Knowledge Gaps

Engaging with practice questions helps candidates recognize topics they are less familiar with, allowing targeted revision and focused study sessions to bridge knowledge gaps.

Components of a Typical Value Engineering Sample Exam

Multiple-Choice Questions (MCQs)

Most sample exams contain a series of MCQs designed to evaluate understanding of fundamental principles, terminology, and application scenarios. These questions test the candidate's ability to

recall information and apply concepts in straightforward contexts.

Case Study Analyses

Case studies present real-world or hypothetical projects requiring the candidate to analyze problems, identify functions, and suggest cost-effective alternatives. These exercises develop analytical and decision-making skills.

Scenario-Based Problems

Scenario questions simulate complex situations where multiple factors interact, demanding a comprehensive approach to problem solving. Candidates may need to perform function analysis, evaluate alternatives, and justify recommendations.

Time Management and Exam Strategy Elements

Sample exams often incorporate timed components, encouraging candidates to develop effective pacing strategies to allocate appropriate time to each question or section.

Sample Questions in a Value Engineering Exam

Example MCQ

- Which of the following is the primary goal of value engineering?
- Maximize project scope regardless of cost
- Reduce costs without sacrificing essential functions
- Increase project schedule
- Enhance aesthetic appeal only

Correct answer: Reduce costs without sacrificing essential functions

Example Case Study Question

Given a construction project with a high material cost for steel beams, analyze the functions of the steel beams and suggest alternative materials or methods that could reduce costs while maintaining structural integrity. Justify your recommendations based on value engineering principles.

Scenario-Based Question

You are managing a manufacturing process where the assembly line uses a specialized machine that is costly and complex to maintain. The machine's primary function is to assemble component A to component B. Propose alternative solutions that could achieve the same function at a lower cost and explain your reasoning.

Strategies for Preparing for the Value Engineering Sample Exam

Review Core Topics Thoroughly

- Function analysis and evaluation
- Cost analysis and reduction techniques
- Creative brainstorming methods
- Design for value and life cycle considerations
- Team-based value engineering processes (e.g., the VE Job Plan)

Practice with Sample Questions and Tests

Use official or reputable practice exams to simulate test conditions. Focus on accuracy, timing, and question comprehension.

Develop Critical Thinking Skills

Enhance your ability to analyze problems from multiple perspectives and generate innovative solutions through case studies and group exercises.

Utilize Study Guides and Resources

- Value engineering textbooks
- Online courses and webinars
- Professional organizations' resources (e.g., SAVE International)
- Study groups and peer discussion forums

Common Mistakes to Avoid During the Practice and Actual Exam

- Neglecting to read questions thoroughly
- Rushing through questions without proper analysis
- Failing to allocate time effectively among questions
- Overlooking key terms or instructions in questions

- Not reviewing answers if time permits before submitting

Benefits of Doing a Value Engineering Sample Exam Multiple Times

- Builds confidence by familiarizing with the exam structure
- Improves time management skills through repeated practice
- Reinforces knowledge and memory retention
- Helps develop an intuitive understanding of question types and expected responses
- Allows tracking of progress and identifying persistent weak areas

Final Tips for Success

- Stay consistent with your study schedule and practice regularly
- Focus on understanding concepts rather than rote memorization
- Use official or trusted practice exams to ensure relevance
- Practice under timed conditions to simulate real exam pressure
- Review and analyze your answers to learn from mistakes
- Maintain a positive attitude and stay motivated throughout the preparation process

Conclusion: Leveraging Sample Exams for Certification Success

A **value engineering sample exam** is an invaluable resource for anyone pursuing certification or looking to sharpen their practical knowledge in the field. It bridges the gap between theoretical understanding and real-world application, helping candidates develop confidence, strategic thinking, and exam readiness. By systematically practicing with well-constructed sample questions, analyzing mistakes, and refining problem-solving approaches, candidates significantly increase their chances of passing the actual exam and becoming proficient in value engineering practices. Remember, consistent practice combined with a thorough grasp of core principles is the key to success in this dynamic and impactful discipline.

Value Engineering Sample Exam: A Comprehensive Guide to Mastering the Test

Introduction to Value Engineering and Its Significance

Value Engineering (VE) is a systematic and organized approach aimed at optimizing the value of a project, product, or process by analyzing its functions, reducing costs, and improving quality without compromising on performance or reliability. As industries continuously seek cost-effective solutions, the importance of understanding VE principles has surged, making the Value Engineering Sample Exam an essential stepping stone for professionals aiming to validate their expertise.

Preparing effectively with a well-structured sample exam not only boosts confidence but also familiarizes candidates with the exam format, typical questions, and key concepts. This guide provides an in-depth overview of what to expect from the sample exam, how to approach it, and strategies to excel.

Understanding the Purpose of the Value Engineering Sample Exam

Why Practice with Sample Exams?

- **Assessment of Knowledge:** It helps identify strengths and areas needing improvement.
- **Familiarity with Exam Format:** Understanding question types, time constraints, and scoring.
- **Application of Theoretical Concepts:** Reinforces understanding through practical application.
- **Confidence Building:** Reduces exam anxiety by simulating real test conditions.

Key Components Covered

A typical Value Engineering sample exam encompasses various topics, including:

- Fundamental VE principles
- Cost analysis and estimating
- Function analysis
- Creative thinking techniques
- Evaluation and implementation strategies
- Life-cycle costing
- Team dynamics and roles
- Documentation and reporting

Deep Dive into the Structure of a Typical Sample Exam

Types of Questions

Sample exams often feature a mix of question formats:

- **Multiple Choice Questions (MCQs):** Assess knowledge of definitions, principles, and procedures.
- **Scenario-Based Questions:** Present real-world situations requiring application of VE techniques.
- **Matching and Fill-in-the-Blank:** Test terminology and concept associations.
- **Short Answer/Essay Questions:** Evaluate understanding in depth, often requiring explanation of

concepts.

Typical Question Distribution

| Question Type | Approximate Percentage | Focus Areas |

|-----|-----|-----|

| Multiple Choice | 50-60% | Basic principles, terminology, techniques |

| Scenario-Based | 20-25% | Case studies, problem-solving |

| Matching/Fill-in | 10-15% | Key terms, definitions |

| Short Answer | 10% | Analytical reasoning, process explanation |

Core Topics and Sample Questions

- Fundamentals of Value Engineering

- Definition: What is the primary goal of VE?

- Question Example: Which of the following best describes the primary purpose of value engineering?

- a) Reducing costs regardless of quality
- b) Improving the function-to-cost ratio
- c) Increasing project scope
- d) Accelerating project timelines

(Correct answer: b)

- Function Analysis and Function Costing

- Understanding Functions: How to identify primary and secondary functions.

- Sample Question: In function analysis, what is the purpose of establishing the function of a component?

- a) To determine its aesthetic value
- b) To identify unnecessary features

- c) To understand its essential role in overall system performance
- d) To facilitate procurement processes

(Correct answer: c)

- Creative Thinking and Brainstorming Techniques

- Tools and Methods: Use of techniques like brainstorming, morphological analysis.
- Sample Question: Which technique is most effective for generating multiple alternative solutions

during VE studies?

- a) Root cause analysis
- b) Brainstorming
- c) Cost estimation
- d) Critical path method

(Correct answer: b)

- Cost Estimation and Analysis

- Types of Costs: Fixed, variable, direct, indirect.
- Sample Question: Which of the following best describes 'life-cycle costing'?
- a) Cost only during the initial purchase
- b) Cost over the entire lifespan of a product or project
- c) Cost associated solely with maintenance
- d) Cost of replacement parts

(Correct answer: b)

- Evaluation and Implementation of VE Ideas

- Criteria for Selection: Feasibility, cost savings, impact.
- Sample Question: When evaluating VE proposals, which factor is least important?
- a) Cost savings potential
- b) Impact on project schedule
- c) Aesthetic appeal

- d) Technical feasibility

(Correct answer: c)

Strategies for Approaching the Sample Exam

Time Management

- Allocate specific time blocks for each section based on question weight.
- Prioritize easier questions to secure marks early.
- Leave challenging questions for later, ensuring no questions are left unanswered.

Reading Questions Carefully

- Understand what is being asked before answering.
- Watch out for qualifiers like "not," "except," or "most appropriate."

Use of Process of Elimination

- Narrow down options by eliminating clearly incorrect choices.
- Increase chances of selecting the right answer, especially for MCQs.

Practice with Realistic Scenarios

- Engage with case studies to develop problem-solving skills.
- Practice analyzing project scenarios and proposing VE solutions.

Resources and Tools for Effective Preparation

- Standard Reference Materials: ASCE, SAVE International guidelines, and industry standards.
- Sample Exam Papers: Practice exams from reputable sources.
- Study Guides and Flashcards: For key concepts and terminology.
- Workshops and Courses: Interactive learning sessions focusing on VE techniques.

Tips for Success

- Develop a systematic approach to function analysis.
- Master the vocabulary associated with VE.
- Focus on understanding processes rather than memorizing answers.
- Review explanations for incorrect answers to enhance learning.
- Join study groups to exchange knowledge and problem-solving approaches.

Post-Exam: Interpreting Results and Next Steps

- Review your performance, especially on questions you found challenging.
- Identify knowledge gaps for targeted study.
- Prepare for the certification or professional recognition process, if applicable.
- Use feedback to refine your approach for future assessments.

Conclusion

Mastering the Value Engineering Sample Exam is a crucial step toward becoming proficient in VE methodologies. It provides a realistic preview of the exam environment, helps reinforce core concepts, and sharpens problem-solving skills. Preparing thoroughly by understanding the exam structure, practicing diverse questions, and employing effective strategies will significantly enhance your chances of success. Remember, the key to excelling in value engineering is not just rote memorization but a deep understanding of how to analyze functions, generate innovative solutions, and evaluate their impact on project value. Embrace the preparation process, and you'll be well on your way to achieving your professional goals in value engineering and cost optimization.

Happy studying and best of luck on your value engineering journey!

Question What is the primary goal of a value engineering sample exam? The primary goal of a value engineering sample exam is to assess an individual's understanding of value engineering principles, techniques, and methodologies to optimize project functions while minimizing costs. Which topics are typically covered in a value engineering sample exam? Topics usually include function analysis, cost-benefit analysis, creative problem-solving, the value engineering job plan, team roles, and the application of value engineering during project design and development. How can I best prepare for a value engineering sample exam? Preparation involves studying the fundamental concepts of value engineering, reviewing sample questions and answers, understanding the value engineering job plan, and practicing case studies to apply techniques in real-world scenarios. What is a common format of questions in a value engineering sample exam? Questions often include multiple-choice, true/false, and scenario-based questions that require applying value engineering principles to specific project situations. Are there any recommended resources for practicing value engineering sample exams? Yes, resources include the ASCE Value Engineering Reference Manual, ASTM standards, online practice tests, and training courses offered

by professional organizations like SAVE International. What is the significance of the function analysis in a value engineering exam? Function analysis is crucial as it helps identify the essential functions of a project or component, enabling examinees to evaluate alternatives for cost-effective value improvements. How does understanding the value engineering job plan help in the exam? Understanding the job plan provides a structured approach to conducting value studies, which is often tested through scenario questions to assess how well candidates can apply each step. What are some common pitfalls to avoid when taking a value engineering sample exam? Common pitfalls include rushing through questions, not applying the principles systematically, misinterpreting scenario data, and neglecting to consider alternative solutions thoroughly. Is certification from a value engineering exam recognized internationally? Yes, certifications such as the Certified Value Specialist (CVS) from SAVE International are recognized globally and demonstrate a professional's competency in value engineering practices.

Related keywords: value engineering, sample exam, engineering test, VE exam prep, value engineering principles, engineering certification, exam questions, cost reduction, engineering study guide, professional engineering exam

BOOK VALUE GUIDE

book value guide

Understanding the concept of book value is essential for investors, business owners, and individuals involved in asset management. Whether you're evaluating a company's worth, managing personal assets, or considering buying or selling equipment, knowing how to determine and interpret book value can provide valuable insights. This comprehensive guide aims to clarify what book value is, how it is calculated, its importance in various contexts, and how to utilize it effectively for decision-making.

What is Book Value?

Definition of Book Value

Book value, also known as net book value or carrying value, refers to the value of an asset as recorded on a company's balance sheet. It represents the original cost of the asset minus any accumulated depreciation, amortization, or impairment costs. For a business, the book value of a company is calculated as the difference between total assets and total liabilities.

Distinguishing Book Value from Market Value

While book value is based on accounting records, market value reflects the current price at which an asset or company can be bought or sold in the open market. The two often differ significantly, especially for assets that appreciate or depreciate over time or for companies whose market perception fluctuates.

How to Calculate Book Value

Calculating Book Value of an Asset

The formula for calculating the book value of an individual asset is straightforward:

$$\text{Book Value} = \text{Original Purchase Price} - \text{Accumulated Depreciation}$$

Example:

Suppose a company buys machinery for \$50,000. Over five years, it depreciates by \$5,000 annually.

$$\text{Total depreciation after five years} = \$25,000$$

$$\text{Book value} = \$50,000 - \$25,000 = \$25,000$$

Calculating Book Value of a Company

The book value of a company is derived from its balance sheet:

$$\text{Book Value} = \text{Total Assets} - \text{Total Liabilities}$$

Example:

A company has total assets worth \$10 million and total liabilities of \$6 million.

$$\text{Book value} = \$10 \text{ million} - \$6 \text{ million} = \$4 \text{ million}$$

Importance of Book Value in Business and Investing

Assessing Asset and Company Worth

Book value provides a snapshot of an asset's or company's worth based on historical cost accounting, which is useful for assessing tangible assets' value.

Valuation Metric

Investors often compare a company's market value to its book value to assess whether a stock is undervalued or overvalued. The Price-to-Book (P/B) ratio, which is the market price per share divided by the book value per share, aids in this evaluation.

Tax and Accounting Purposes

Book value is fundamental in accounting for depreciation, amortization, and impairment losses. It also influences tax calculations, as depreciation reduces taxable income.

Limitations of Book Value

Historical Cost Basis

Book value is based on historical costs, which may not reflect the current market value, especially for assets that appreciate over time, such as real estate or collectibles.

Subject to Accounting Policies

Different accounting standards and policies can affect the reported book value, making comparisons across firms or industries challenging.

Intangible Assets Exclusion

Many intangible assets like brand value, intellectual property, or goodwill are either omitted or undervalued in book value calculations, leading to potential underestimation of a company's true worth.

Using Book Value Effectively

Comparison with Market Value

A common practice is to analyze the Price-to-Book (P/B) ratio:

- Calculate the company's market capitalization (stock price × number of outstanding shares).
- Divide it by the total book value of equity.

- Interpretation:
- P/B
- P/B ? 1: Fairly valued.
- P/B > 1: Market expects growth or intangible assets not reflected in book value.

Note: Use caution, as a low P/B ratio may also indicate underlying issues with the company's assets or operations.

Evaluating Asset Quality

Review the book value of individual assets to identify potential write-downs or impairments, especially if the asset's market value has significantly declined.

Investment Strategies Based on Book Value

Investors seeking value stocks often look for companies trading below their book value, believing they are undervalued assets that may appreciate over time.

Advantages and Disadvantages of Relying on Book Value

Advantages

- Provides a clear, objective measure based on historical costs.
- Useful for financial statement analysis and credit assessments.
- Helps identify potential undervalued stocks when compared with market value.

Disadvantages

- Does not account for current market conditions or asset appreciation.
- May undervalue assets that have appreciated over time.
- Excludes intangible assets, which can be significant in modern businesses.
- Can be manipulated through accounting policies and depreciation methods.

Practical Tips for Analyzing Book Value

Review Depreciation Methods

Be aware of the depreciation method used (straight-line, declining balance, etc.), as this affects the book value and its comparability.

Compare with Industry Peers

Assess how a company's book value compares to similar firms to gauge relative valuation.

Consider Asset Quality and Market Conditions

Always complement book value analysis with other metrics, such as cash flow, earnings, and market trends.

Evaluate Intangible Assets

Recognize the limitations regarding intangible assets and consider other valuation methods like discounted cash flows (DCF) or market comparables.

Conclusion

Understanding and utilizing the concept of book value is vital for making informed financial decisions. While it provides a tangible, historical perspective on asset and company valuation, it should not be relied upon in isolation. Combining book value analysis with other financial metrics, market insights, and qualitative factors offers a more comprehensive view of an asset's or company's true worth. Whether you're an investor seeking undervalued stocks, a business owner managing assets, or an analyst performing company valuations, mastering the principles outlined in this guide will enhance your financial acumen and decision-making capabilities.

Book value guide: An Essential Resource for Investors, Collectors, and Business Professionals

In the complex landscape of finance, assets, and valuation, understanding the concept of book value is fundamental. Whether you're an investor assessing a company's financial health, a collector determining the worth of rare books or collectibles, or a business professional evaluating asset values, a comprehensive book value guide offers critical insights. This article aims to demystify the concept of book value, explore its applications across various industries, and provide a detailed framework for effectively utilizing it in decision-making processes.

Understanding Book Value: Definition and Core Concepts

What Is Book Value?

Book value, also known as net book value, is the value of an asset or a company as recorded on its

balance sheet. It represents the original cost of an asset minus any accumulated depreciation, amortization, or impairment costs over time. In the context of companies, the book value often reflects shareholders' equity, which includes assets minus liabilities.

Key Point: Book value is an accounting measure based on historical costs, which may differ significantly from market value or current appraised worth.

Historical vs. Market Value

While book value relies on historical accounting data, market value reflects the current price an asset or company can fetch in the open market. Discrepancies between these two measures are common, particularly for assets like real estate or stocks, where market perceptions and future earnings potential influence value.

Example: A company's stock might trade at a premium or discount to its book value depending on investor sentiment, growth prospects, or industry conditions.

Why Book Value Matters

Understanding book value helps stakeholders assess:

- The intrinsic value of an asset or company.
- Financial stability and solvency.
- Potential undervaluation or overvaluation in the market.
- Asset management efficiency.

The Components of Book Value in Different Contexts

Book Value of a Company

The book value of a company is calculated as:

Book Value = Total Assets - Total Liabilities

This figure appears on the company's balance sheet and represents the net worth attributable to shareholders. It is often used as a baseline for valuation metrics like the Price-to-Book (P/B) ratio.

Components include:

- Assets: Cash, accounts receivable, inventory, property, plant, equipment, intangible assets.
- Liabilities: Short-term debt, long-term debt, accounts payable, accrued expenses.

Note: The book value per share is obtained by dividing the total book value by the number of outstanding shares.

Book Value of Assets

For individual assets, the book value is the original purchase price minus accumulated depreciation or amortization. It provides an accounting measure of asset worth, often used in tax calculations and asset management.

Examples include:

- Machinery and equipment.
- Buildings.
- Patents and trademarks (amortized over time).

Book Value in Valuation Contexts

Investors use book value as a conservative estimate of an asset's worth, especially for valuing companies in sectors like banking and insurance, where assets are primarily tangible and easily valued.

Calculating Book Value: Step-by-Step Guidance

For Companies

- Gather Financial Statements: Obtain the latest balance sheet.
- Calculate Total Assets: Sum all assets listed.
- Determine Total Liabilities: Sum all liabilities.
- Compute Shareholders' Equity: Subtract liabilities from assets.
- Adjust for Non-Operating Items: Remove intangible assets or goodwill if necessary, especially for valuation purposes.

Formula:

Book Value = Total Assets - Total Liabilities

For Individual Assets

- Identify Original Cost: Purchase price of the asset.
- Subtract Accumulated Depreciation/Amortization: Based on depreciation schedules.
- Adjust for Impairments: Write-downs or impairments reduce book value.

Example:

A machine bought for \$100,000 with accumulated depreciation of \$20,000 has a book value of \$80,000.

Applications of Book Value Across Industries

Investment Analysis

Investors often compare a company's market value to its book value via the Price-to-Book (P/B) ratio:

$$\text{P/B Ratio} = \text{Market Price per Share} / \text{Book Value per Share}$$

- A P/B ratio below 1 may suggest the stock is undervalued.
- A ratio above 1 could indicate overvaluation or expectations of future growth.

Limitations:

Book value may not fully capture intangibles like brand value, intellectual property, or future earnings potential.

Asset Management and Accounting

Accurately tracking book value helps companies monitor depreciation, plan for asset replacements, and comply with accounting standards.

Valuation of Business or Assets

In mergers and acquisitions, the book value provides a starting point, although market value, earnings multiples, and other factors are crucial for comprehensive valuation.

Collectors and Rare Item Valuation

For collectors of rare books, art, or antiques, book value guides provide baseline estimates, factoring in rarity, condition, provenance, and market demand.

Limitations and Criticisms of Book Value

While useful, book value has inherent limitations:

- Historical Cost Basis: It often undervalues assets that appreciate over time.
- Intangible Assets: Many intangibles like trademarks or customer relationships are challenging to value accurately.
- Depreciation Policies: Different accounting standards can significantly impact book values.
- Market Discrepancy: Book value may not reflect current market conditions or future earning potential.
- Potential for Manipulation: Earnings management and accounting choices can distort reported book values.

Implication: Users should consider book value alongside other valuation metrics like market value, earnings, cash flows, and industry trends.

Enhancing the Usefulness of Book Value: Best Practices

Complement with Other Valuation Methods

- Market Comparables: Comparing similar companies or assets.
- Discounted Cash Flow (DCF): Estimating present value based on projected cash flows.
- Earnings Multiples: Using P/E ratios or EBITDA multiples.

Adjustments for Accurate Assessment

- Remove intangible assets if they are not reliably valued.
- Consider the quality and age of assets.
- Account for economic obsolescence or market changes.

Continuous Monitoring

Regular updates to financial data and depreciation schedules enhance accuracy and decision-making relevance.

Conclusion: The Significance of a Book Value Guide

A well-structured book value guide serves as an indispensable tool for a broad spectrum of stakeholders. It provides foundational knowledge, clarifies calculation methodologies, and highlights the contextual applications across industries. Although it has limitations, understanding its nuances equips investors, business managers, and collectors with a more comprehensive perspective on asset valuation and financial health.

In an era where market volatility and intangible assets are increasingly prominent, the role of book value remains vital but must be complemented with other valuation approaches. Ultimately, mastering the intricacies of book value enables more informed, strategic decisions—whether assessing a company's worth, managing assets effectively, or valuing rare collectibles. For anyone engaged in asset valuation, a thorough book value guide is an essential resource to navigate the complexities of financial and asset management.

Question What is a book value guide and why is it important? A book value guide is a resource that helps determine the estimated value of an asset or a company's stock based on its financial statements and accounting records. It is important for investors and business owners to assess asset worth, make informed investment decisions, and evaluate financial health. **How do I calculate the book value of a company?** The book value of a company is calculated by subtracting its total liabilities from its total assets, as reported on the balance sheet. The formula is: $\text{Book Value} = \text{Total Assets} - \text{Total Liabilities}$. **What are the limitations of using a book value guide?** Book value may not reflect current market conditions or the true worth of assets, especially for intangible assets like brand value or intellectual property. It also doesn't account for future earning potential or market sentiment, making it a conservative estimate rather than an absolute valuation. **How can a book value guide assist in investment decisions?** Investors use book value guides to identify undervalued stocks by comparing the market price to the book value per share. A stock trading below its book value might indicate a potential investment opportunity, though other factors should also be considered. **What is the difference between book value and market value?** Book value represents the accounting value of an asset or company based on financial statements, while market value is the price at which an asset or stock is traded in the open market, which can fluctuate based on market conditions, investor perception, and future outlook. **Can a book value guide be used for asset valuation in real estate?** Yes, a book value guide can be used to estimate the value of real estate assets by assessing their recorded value on financial statements. However, for accurate market valuation, appraisals and comparables are often necessary, as book value may not reflect current market conditions.

Related keywords: book value, valuation guide, asset appraisal, depreciation schedule, market value, asset worth, liquidation value, resale value, inventory valuation, financial reporting

Read the full article online: [book value guide](#)