

the theory of interest kellison

The Theory of Interest Kellison: Understanding Time Value and Financial Mathematics

the theory of interest kellison offers a foundational perspective in the field of financial mathematics, particularly in how interest accumulates over time and how this impacts investments, loans, and other financial instruments. Rooted deeply in actuarial science, Kellison's approach is often referenced in academic settings and professional actuarial exams, providing a structured way to analyze the time value of money and related concepts.

What is the Theory of Interest Kellison?

At its core, the theory of interest as presented by Steven G. Kellison revolves around understanding how money grows over time through accumulation functions, discounting, and interest rates. It delves into the principles that govern the valuation of cash flows occurring at different times, a concept essential not only in finance but in insurance, pensions, and banking as well.

Kellison's treatment of the theory of interest is comprehensive, covering both simple and compound interest, annuities, loans, bonds, and other financial products. His work emphasizes the mathematical rigor behind interest calculations while maintaining practical applications that help students and professionals grasp how money behaves under various interest regimes.

The Importance of Time Value of Money in Kellison's Theory

One of the key pillars of the theory of interest Kellison discusses is the time value of money (TVM). This principle states that a dollar today is worth more than a dollar in the future due to its potential earning capacity. This is a fundamental concept in finance, influencing decisions from personal savings to corporate finance strategies.

Kellison explains various interest rate models and how they affect the accumulation of wealth or debt. For instance, the difference between simple interest and compound interest is highlighted to show how compounding accelerates the growth of an investment over time.

Key Concepts in Kellison's Theory of Interest

To fully appreciate the theory of interest Kellison outlines, it's helpful to understand some essential terms and concepts:

1. Accumulation Function

The accumulation function describes how the value of an initial sum changes as it earns interest over time. Kellison formalizes this using mathematical functions that model growth, such as $a(t)$, which represents the accumulated value at time t .

2. Discount Function

Closely related to accumulation is the discount function, which determines the present value of a future amount. This is crucial for valuing cash flows that occur at different times, allowing for fair comparisons and financial decision-making.

3. Interest Rates and Effective Interest Rate

Kellison differentiates between nominal and effective interest rates, emphasizing the impact of compounding frequency on the actual rate of return or cost of borrowing.

4. Annuities and Perpetuities

The theory explores structured payments like annuities—regular payments over a fixed term—and perpetuities, payments that continue indefinitely. Understanding these helps in valuing pensions, mortgages, and other financial products.

How Kellison's Approach Enhances Financial Understanding

What sets the theory of interest Kellison apart is its balance of theory and application. His explanations are not merely theoretical; they include practical examples and exercises that illuminate how interest calculations affect real-world financial decisions. For example, by applying Kellison's formulas, one can determine:

- The future value of periodic investments
- The present value of a stream of payments
- Loan amortization schedules
- Bond pricing and yields

This makes the theory particularly useful for actuaries, financial analysts, and anyone involved in financial planning or investment analysis.

Practical Applications of the Theory of Interest Kellison

Understanding Loans and Mortgages

When borrowing money, interest calculations determine the amount owed over time. Kellison's framework helps borrowers and lenders understand amortization schedules—how much of each payment goes toward interest versus principal.

Investment Growth Forecasting

Investors use the theory of interest to project the future value of their investments under different interest rate scenarios. This aids in portfolio planning and risk assessment.

Insurance and Pension Planning

Actuaries rely heavily on Kellison's theory to calculate premiums, reserves, and pension liabilities. The ability to accurately discount future cash flows is vital for these long-term financial products.

Tips for Mastering the Theory of Interest Kellison

If you're a student or professional diving into Kellison's work, here are some tips to deepen your understanding:

- ****Practice with Real-Life Problems:**** Apply concepts to actual financial scenarios like loan repayment or retirement savings calculations.
- ****Understand the Mathematical Foundations:**** Grasping functions, exponents, and logarithms will make it easier to understand accumulation and discounting.
- ****Visualize Cash Flows:**** Draw timelines to see when payments occur and how interest affects them.
- ****Compare Different Interest Rates:**** Experiment with nominal versus effective rates to see their practical differences.
- ****Use Financial Calculators or Software:**** Tools like Excel or financial calculators can help perform complex calculations and verify your work.

The Role of the Theory of Interest Kellison in Modern Finance Education

Kellison's theory remains a cornerstone in many actuarial exams and university courses on financial mathematics. Its structured approach to interest theory helps learners build a solid foundation before moving on to more advanced topics like stochastic interest rates or financial derivatives.

In addition, the theory serves as a bridge between theoretical finance and practical applications, equipping learners with the skills necessary to evaluate investments, loans, and insurance products accurately.

Exploring Related Concepts: Beyond Kellison's Theory

While Kellison's work is foundational, it also opens the door to exploring related topics such as:

- **Continuous Compounding:** Understanding how interest accumulates when compounded continuously rather than at discrete intervals.
- **Yield Curves and Term Structures:** How interest rates vary over different maturities, important for bond pricing.
- **Risk and Return Trade-offs:** The relationship between interest rates and the riskiness of financial instruments.
- **Inflation-Adjusted Interest Rates:** Considering the impact of inflation on real returns.

These areas build upon Kellison's principles, expanding the understanding of interest theory in a dynamic financial environment.

Final Thoughts on the Theory of Interest Kellison

Engaging with the theory of interest Kellison offers a comprehensive journey into the mechanics of how money grows and shrinks over time. Whether you're studying for exams, managing investments, or working in finance, understanding these principles provides a powerful toolkit for making informed financial decisions. The clarity and depth of Kellison's approach continue to make his theory a valuable resource in the ever-evolving world of finance.

Frequently Asked Questions

What is 'The Theory of Interest' by Steven G. Kellison about?

'The Theory of Interest' by Steven G. Kellison is a comprehensive textbook that explains the mathematical foundations and practical applications of interest theory, including topics such as present and future value, annuities, amortization, and yield rates.

Who is Steven G. Kellison in the context of

actuarial science?

Steven G. Kellison is an author and educator known for his influential textbook 'The Theory of Interest,' which is widely used in actuarial science and finance to teach the fundamental principles of interest calculations and financial mathematics.

Why is 'The Theory of Interest' by Kellison important for actuarial exams?

'The Theory of Interest' by Kellison is important for actuarial exams because it provides clear explanations and numerous examples of interest theory concepts that are essential for understanding financial mathematics, which is a critical component in actuarial exam syllabi.

What are some key topics covered in Kellison's 'The Theory of Interest'?

Key topics covered include simple and compound interest, annuities, bonds, amortization schedules, yield rates, force of interest, and various methods of interest calculation used in finance and insurance.

How does Kellison's approach in 'The Theory of Interest' differ from other finance textbooks?

Kellison's approach is noted for its clear, concise explanations and focus on the mathematical theory behind interest, making it particularly useful for students in actuarial science and finance who need a rigorous understanding of interest theory rather than just practical applications.

Can 'The Theory of Interest' by Kellison be used for self-study?

Yes, 'The Theory of Interest' by Kellison is well-suited for self-study due to its structured presentation, worked examples, and exercises, helping students and professionals independently grasp complex concepts in interest theory and financial mathematics.

Additional Resources

The Theory of Interest Kellison: An In-Depth Exploration of Financial Valuation Principles

the theory of interest kellison represents a critical framework in the field of actuarial science and financial mathematics. Developed and popularized through the works of economist and actuary W. A. Kellison, this theory provides foundational insight into how interest rates influence the valuation

of financial assets and liabilities over time. It is particularly relevant in insurance mathematics, pension fund management, and investment analysis, where the time value of money and discounting future cash flows are pivotal concepts.

Understanding the theory of interest Kellison sheds light on the intricate relationship between interest accumulation, discounting mechanisms, and the valuation of contingent claims. With growing complexities in financial markets and regulatory environments, revisiting this theory offers professionals a robust analytical tool to model interest-sensitive products accurately.

Historical Context and Development

W. A. Kellison's contributions emerged during the early 20th century, a period marked by rapid advancements in actuarial computations and financial modeling. The theory of interest Kellison evolved as an extension and refinement of classical interest theories, incorporating stochastic elements and practical considerations that better reflected real-world financial situations.

Unlike simple interest models of the past, Kellison emphasized the importance of compound interest and introduced formulations to handle varying interest rates over time. This approach allowed for more precise calculations in insurance reserves and annuities, where cash flows do not occur uniformly and interest rates fluctuate.

Core Principles of the Theory

At its heart, the theory of interest Kellison revolves around the concept of the time value of money—the idea that a sum of money today is worth more than the same sum in the future due to its potential earning capacity. Kellison's framework formalizes this notion through mathematical expressions that account for:

- **Accumulation functions:** Calculating the future value of present amounts under compound interest.
- **Discount factors:** Determining the present value of future cash flows by reversing accumulation.
- **Variable interest rates:** Adjusting calculations to reflect changing rates over different periods.

These principles allow actuaries and financial analysts to determine the worth of complex financial instruments such as life insurance policies, pension obligations, and investment portfolios with multiple cash flow timings.

Analytical Framework and Mathematical Foundations

The mathematical rigor in the theory of interest Kellison is one of its defining features. It extends beyond basic compound interest formulas by integrating probability theory and stochastic processes, thereby accommodating uncertainty in interest rates and cash flow timing.

Accumulation and Discount Functions

A key element is the use of accumulation functions, denoted typically as $a(t)$, which represent how a principal grows over time t at a certain interest rate. Kellison's approach allows for non-constant interest rates, meaning $a(t)$ can be modeled as:

$$a(t) = \prod_{i=1}^n (1 + i_i)$$

where i_i is the interest rate for the i^{th} period. This multiplicative model contrasts with standard exponential functions used in continuous compounding, offering flexibility for discrete and varying rates.

Discount functions, the inverse of accumulation, help in calculating present values:

$$v(t) = \frac{1}{a(t)}$$

This reciprocal relationship is fundamental in pricing future obligations or income streams, a common task in insurance and pension fund assessments.

Incorporation of Uncertainty

Kellison's theory also addresses interest rate volatility by incorporating stochastic interest models. Unlike deterministic models that assume fixed rates, these stochastic models reflect market realities more accurately, where interest rates evolve randomly over time.

This extension is critical for risk management and for pricing financial derivatives sensitive to interest rate changes, such as interest rate swaps, bond options, and mortgage-backed securities.

Applications in Modern Financial Contexts

The theory of interest Kellison remains highly relevant across several financial disciplines, particularly in areas where the valuation of future cash flows under uncertainty is crucial.

Insurance Mathematics and Actuarial Science

In life insurance, the accurate calculation of reserves requires discounting expected future claims and premiums. Kellison's theory provides the mathematical underpinning to manage this process, particularly with varying interest environments and mortality assumptions.

Actuaries use the theory to:

- Determine net premium reserves
- Calculate the present value of annuity payments
- Model the impact of interest rate fluctuations on policy liabilities

Pension Fund Management

Pension funds must estimate the present value of future benefit payments while accounting for uncertain investment returns. The flexibility of Kellison's accumulation and discount functions to handle variable rates makes this theory instrumental in pension valuations and funding strategies.

Investment Analysis and Fixed Income Securities

For bond valuation and portfolio management, the theory facilitates the computation of yield curves, duration, and convexity measures. Its incorporation of stochastic interest rates improves pricing accuracy for instruments sensitive to rate changes.

Comparative Overview with Other Interest Theories

While Kellison's theory is comprehensive, it is beneficial to contrast it with other prevalent interest theories:

- **Classical Compound Interest:** Assumes constant rates and fixed compounding intervals, limiting applicability in volatile environments.
- **Continuous Compounding Models:** Use exponential functions but often ignore discrete cash flows and varying rates.
- **Stochastic Interest Rate Models:** More sophisticated in capturing randomness but computationally intensive.

Kellison's framework strikes a balance by allowing variable rates with manageable complexity, making it a practical choice for many actuarial and financial applications.

Advantages and Limitations

The theory of interest Kellison offers several advantages:

- **Flexibility:** Accommodates varying interest rates and discrete cash flows.
- **Practicality:** Suitable for real-world applications in insurance and finance.
- **Integration with Stochastic Models:** Addresses uncertainty in interest rates.

However, it also faces limitations:

- **Computational Complexity:** More complex than simple interest models, requiring advanced calculation tools.
- **Data Dependency:** Accurate modeling depends on reliable interest rate forecasts and mortality tables.
- **Assumption Sensitivity:** Results can vary significantly with small

changes in assumptions, necessitating careful model calibration.

Despite these challenges, the theory remains a cornerstone in actuarial education and professional practice.

Contemporary Relevance and Future Outlook

In an era of low and fluctuating interest rates, understanding the nuances of interest theory is more critical than ever. The theory of interest Kellison equips professionals with the tools to navigate uncertain financial landscapes, optimize asset-liability management, and comply with evolving regulatory frameworks such as IFRS 17 and Solvency II.

Emerging technologies, including machine learning and big data analytics, may further enhance the application of Kellison's principles by improving interest rate forecasting and risk assessment. As financial markets grow in complexity, the need for robust theoretical foundations like Kellison's will continue to influence actuarial science and financial engineering.

Through its blend of mathematical sophistication and practical applicability, the theory of interest Kellison stands as a vital framework for professionals seeking to understand and manage the dynamics of interest in financial valuations.

The Theory Of Interest Kellison

the theory of interest kellison: *Theory of Interest* Kellison, 2008 The third edition of The Theory of Interest is significantly revised and expanded from previous editions. The text covers the basic mathematical theory of interest as traditionally developed. The book is a thorough treatment of the mathematical theory and practical applications of compound interest, or mathematics of finance. The pedagogical approach of the second edition has been retained in the third edition. The textbook narrative emphasizes both the importance of conceptual understanding and the ability to apply the techniques to practical problems. The third edition has considerable updates that make this book relevant to students in this course area.

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borrower or investor. The book is suitable for a mid-level or upper-level undergraduate course or a beginning graduate course. The content of the book, along with an understanding of probability, will provide a solid foundation for readers embarking on actuarial careers. The text has been suggested by the Society of Actuaries for people preparing for the Financial Mathematics exam. To that end, Mathematical Interest Theory includes more than 260 carefully worked examples. There are over 475 problems, and numerical answers are included in an appendix. A companion student solution manual has detailed solutions to the odd-numbered problems. Most of the examples involve computation, and detailed instruction is provided on how to use the Texas Instruments BA II Plus and BA II Plus Professional calculators to efficiently solve the problems. This Third Edition updates the previous edition to cover the material in the SOA study notes FM-24-17, FM-25-17, and FM-26-17.

the theory of interest kellison: An Introduction to Computational Risk Management of Equity-Linked Insurance Runhuan Feng, 2018-06-13 The quantitative modeling of complex systems of interacting risks is a fairly recent development in the financial and insurance industries. Over the past decades, there has been tremendous innovation and development in the actuarial field. In addition to undertaking mortality and longevity risks in traditional life and annuity products, insurers face unprecedented financial risks since the introduction of equity-linking insurance in 1960s. As the industry moves into the new territory of managing many intertwined financial and insurance risks, non-traditional problems and challenges arise, presenting great opportunities for technology development. Today's computational power and technology make it possible for the life insurance industry to develop highly sophisticated models, which were impossible just a decade ago. Nonetheless, as more industrial practices and regulations move towards dependence on stochastic models, the demand for computational power continues to grow. While the industry continues to rely heavily on hardware innovations, trying to make brute force methods faster and more palatable, we are approaching a crossroads about how to proceed. An Introduction to Computational Risk Management of Equity-Linked Insurance provides a resource for students and entry-level professionals to understand the fundamentals of industrial modeling practice, but also to give a glimpse of software methodologies for modeling and computational efficiency. Features Provides a comprehensive and self-contained introduction to quantitative risk management of equity-linked insurance with exercises and programming samples Includes a collection of mathematical formulations of risk management problems presenting opportunities and challenges to applied mathematicians Summarizes state-of-arts computational techniques for risk management professionals Bridges the gap between the latest developments in finance and actuarial literature and the practice of risk management for investment-combined life insurance Gives a comprehensive review of both Monte Carlo simulation methods and non-simulation numerical methods Runhuan Feng is an Associate Professor of Mathematics and the Director of Actuarial Science at the University of Illinois at Urbana-Champaign. He is a Fellow of the Society of Actuaries and a Chartered Enterprise Risk Analyst. He is a Helen Corley Petit Professorial Scholar and the State Farm Companies Foundation Scholar in Actuarial Science. Runhuan received a Ph.D. degree in Actuarial Science from the University of Waterloo, Canada. Prior to joining Illinois, he held a tenure-track position at the University of Wisconsin-Milwaukee, where he was named a Research Fellow. Runhuan received numerous grants and research contracts from the Actuarial Foundation and the Society of Actuaries in the past. He has published a series of papers on top-tier actuarial and applied probability journals on stochastic analytic approaches in risk theory and quantitative risk management of equity-linked insurance. Over the recent years, he has dedicated his efforts to developing computational methods for managing market innovations in areas of investment combined insurance and retirement planning.

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applications and giving the reader a concrete understanding as to why the various relationships should be true. Modern financial topics including arbitrage, options, futures, and swaps are introduced. Along with an understanding of probability, this book provides a solid foundation for readers embarking on actuarial careers. It also includes detailed instruction on how to use the Texas Instruments BA II Plus and BA II Plus Professional calculators. This text is among the recommended reading options for the Society of Actuaries/Casualty Actuarial Society FM/2 exam.

the theory of interest kellison: Mathematics of Investment and Credit Samuel A. Broverman, 2010 This book has been named as a reference for the Society of Actuaries Exam FM and the Casualty Actuarial Society Exam 2. It is also listed in the Course of Reading for the EA-1 examination of the Joint Board for the Enrollment of Actuaries. Mathematics of Investment and Credit is a leading textbook covering the topic of interest theory. It is the required or recommended text in many college and university courses on this topic, as well as for Exam FM/2. This text provides a thorough treatment of the theory of interest, and its application to a wide variety of financial instruments. It emphasizes a direct-calculation approach to reaching numerical results, and uses a gentle, thorough pedagogic style. This text includes detailed treatments of the term structure of interest rates, forward contracts of various types, interest rate swaps and financial options and option strategies. Key formulas and definitions are highlighted. Real world current events are included to demonstrate key concepts. The text contains a large number of worked examples and end-of-chapter exercises. The Fifth Edition includes expanded coverage of forwards, futures, swaps and options in order to address the Learning Objectives for the financial mathematics component of Exam FM/2.

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vanilla bonds to interest rate derivatives and mortgage-backed securities. With helpful numerical illustrations and explanations on the use of specific functions in Excel, this book presents essential constructs and concepts, with a simultaneous focus on practical applications and issues of interest to market professionals. Sunil Kumar Parameswaran delves into the time value of money, bonds, yield measures, money markets, interest rate futures, and interest rate swaps to provide an in-depth look at issues pertaining to fixed income securities. This book is an essential resource for professionals in the fields of brokerage, insurance, mutual funds, pension funds, hedge funds, commercial and investment banks, as well as students of finance.

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the theory of interest kellison: *Models for Quantifying Risk, Sixth Edition* Stephen J. Camilli, ASA, Ian Duncan, FSA, FIA, FCIA, MAAA, Richard L. London, FSA, 2014-06-24 This book is used in many university courses for SOA Exam MLC preparation. The Fifth Edition is the official reference for CAS Exam LC. The Sixth Edition of this textbook presents a variety of stochastic models for the actuary to use in undertaking the analysis of risk. It is designed to be appropriate for use in a two or three semester university course in basic actuarial science. It was written with the SOA Exam MLC and CAS Exam LC in mind. Models are evaluated in a generic form with life contingencies included as one of many applications of the science. Students will find this book to be a valuable reference due to its easy-to-understand explanations and end-of-chapter exercises. In 2013 the Society of Actuaries announced a change to Exam MLC's format, incorporating 60% written answer questions and new standard notation and terminology to be used for the exam. There are several areas of expanded content in the Sixth Edition due to these changes. Six important changes to the Sixth Edition: WRITTEN-ANSWER EXAMPLES This edition offers additional written-answer examples in order to better prepare the reader for the new SOA exam format. NOTATION AND TERMINOLOGY CONFORMS TO EXAM MLC MQR 6 fully incorporates all standard notation and terminology for exam MLC, as detailed by the SOA in their document Notation and Terminology Used on Exam MLC. MULTI-STATE MODELS Extension of multi-state model representation to almost all topics covered in the text. FOCUS ON NORTH AMERICAN MARKET AND ACTUARIAL PROFESSION This book is written specifically for the multi-disciplinary needs of the North American Market. This is reflected in both content and terminology. PROFIT TESTING, PARTICIPATING INSURANCE, AND UNIVERSAL LIFE MQR 6 contains an expanded treatment of

these topics. THIELE'S EQUATION Additional applications of this important equation are presented, to more fully prepare the reader for exam day. A separate solutions manual with detailed solutions to all of the text exercises is also available. Please see the Related Items Tab for a direct link I selected Models for Quantifying Risk as the text for my class. Given that the syllabus had changed quite dramatically from prior years, I was looking for a text that would cover all the material in the new syllabus in a way that was rigorous, easy to understand, and would prepare students for the May 2012 MLC exam. To me, the text with the accompanying solutions manual does precisely that. --Jay Vadiveloo, Ph.D., FSA, MAAA, CFA, Math Department, University of Connecticut I found that the exposition of the material is thorough while the concepts are readily accessible and well illustrated with examples. The book was an invaluable source of practice problems when I was preparing for the Exam MLC. Studying from it enabled me to pass this exam. -- Dmitry Glotov, Math Department, University of Connecticut This book is extremely well written and structured. -- Kate Li, Student, University of Connecticut Overall, the text is thorough, understandable, and well-organized. The clear exposition and excellent use of examples will benefit the student and help her avoid 'missing the forest for the trees'. I was impressed by the quality and quantity of examples and exercises throughout the text; students will find this collection of problems sorted by topic valuable for their exam preparation. Overall, I strongly recommend the book. -- Kristin Moore, Ph.D., ASA, University of Michigan

the theory of interest kellison: Introduction to Quantitative Finance Robert R. Reitano, 2010-01-29 An introduction to many mathematical topics applicable to quantitative finance that teaches how to "think in mathematics" rather than simply do mathematics by rote. This text offers an accessible yet rigorous development of many of the fields of mathematics necessary for success in investment and quantitative finance, covering topics applicable to portfolio theory, investment banking, option pricing, investment, and insurance risk management. The approach emphasizes the mathematical framework provided by each mathematical discipline, and the application of each framework to the solution of finance problems. It emphasizes the thought process and mathematical approach taken to develop each result instead of the memorization of formulas to be applied (or misapplied) automatically. The objective is to provide a deep level of understanding of the relevant mathematical theory and tools that can then be effectively used in practice, to teach students how to "think in mathematics" rather than simply to do mathematics by rote. Each chapter covers an area of mathematics such as mathematical logic, Euclidean and other spaces, set theory and topology, sequences and series, probability theory, and calculus, in each case presenting only material that is most important and relevant for quantitative finance. Each chapter includes finance applications that demonstrate the relevance of the material presented. Problem sets are offered on both the mathematical theory and the finance applications sections of each chapter. The logical organization of the book and the judicious selection of topics make the text customizable for a number of courses. The development is self-contained and carefully explained to support disciplined independent study as well. A solutions manual for students provides solutions to the book's Practice Exercises; an instructor's manual offers solutions to the Assignment Exercises as well as other materials.

the theory of interest kellison: Financial, Commercial, and Mortgage Mathematics and Their Applications Arun J. Prakash, Dilip K. Ghosh, 2014-09-26 Ideal for college students in intermediate finance courses, this book uniquely applies mathematical formulas to teach the underpinnings of financial and lending decisions, covering common applications in real estate, capital budgeting, and commercial loans. An updated and expanded version of the time-honored classic text on financial math, this book provides, in one place, a complete and practical treatment of the four primary venues for finance: commercial lending, financial formulas, mortgage lending, and resource allocation or capital budgeting techniques. With an emphasis on understanding the principles involved rather than blind reliance on formulas, the book provides rigorous and thorough explanations of the mathematical calculations used in determining the time value of money, valuation of loans by commercial banks, valuation of mortgages, and the cost of capital and capital budgeting techniques for single as well as mutually exclusive projects. This new edition devotes an

entire chapter to a method of evaluating mutually exclusive projects without resorting to any imposed conditions. Two chapters not found in the previous edition address special topics in finance, including a novel and innovative way to approach amortization tables and the time value of money for cash flows when they increase geometrically or arithmetically. This new edition also features helpful how-to sections on Excel applications at the end of each appropriate chapter.

the theory of interest kellison: What's Your Future Worth? Peter Neuwirth, 2015-03-02 We weigh every significant decision based on how it will affect our future. But when it comes to figuring that out, we mostly make the process up as we go along. While financial professional Peter Neuwirth can't help you actually predict the future, he can offer a simple, systematic way to make much better guesses about it, and so make better decisions. Neuwirth offers an accessible, step-by-step guide to using the powerful concept of Present Value, which allows you to determine the value today of something that might happen in the future, to evaluate all of the outcomes that might arise from choosing one path as opposed to another. Using examples that anyone can relate to, Neuwirth walks you through the process. Your old refrigerator doesn't work as well as it used to, should you buy a new one right away or muddle through for a while? You're offered a great discount on a service you don't need at the moment but eventually will, buy the service now or wait? With just a little math and some common sense, you can compare future costs and benefits with present costs and benefits and make apples to apples comparisons. This book will be indispensable for anyone who has ever had to figure out whether to stick with an awful job or follow his or her bliss, fix that old car or buy a new one, increase 401(k) contributions or keep the same take-home pay, and a thousand other decisions.

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