W. W. Norton & Company has been independent since its founding in 1923, when William Warder Norton and Mary D. Herter Norton first published lectures delivered at the People’s Institute, the adult education division of New York City’s Cooper Union. The firm soon expanded its program beyond the Institute, publishing books by celebrated academics from America and abroad. By midcentury, the two major pillars of Norton’s publishing program—trade books and college texts—were firmly established. In the 1950s, the Norton family transferred control of the company to its employees, and today—with a staff of four hundred and a comparable number of trade, college, and professional titles published each year—W. W. Norton & Company stands as the largest and oldest publishing house owned wholly by its employees.
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Why a New Approach?

In December 2007, W. W. Norton conducted a focus group with the brightest minds in educational testing to create a new model for assessment. A good assessment tool must:

1. define what students need to know and the level of knowledge and skills that constitute competence in the concepts they are learning about;
2. include test items that provide valid and reliable evidence of competence by assessing the material to be learned at the appropriate level;
3. enable instructors to accurately judge what students know and how well they know it, allowing instructors to focus on areas where students need the most help.

In evaluating the test banks that accompany introductory texts, we found four main problems:

1. test questions were misclassified in terms of type and difficulty.
2. the prevalence of low-level and factual questions misrepresented the goals of the course.
3. trivial topics were tested via multiple items while important concepts were not tested at all.
4. links to course topics were too general, preventing diagnostic use of the item information.

Norton has collaborated with Valerie Shute (Florida State University) and Diego Zapata-Rivera (Electronic Testing Services) to develop a methodology for delivering high-quality, valid, and reliable assessment through our test banks and our extensive suite of support materials.
How Does It Work?

The test bank authors list, in order of importance, the concepts from each chapter that they believe are the most important for students to learn. The authors then create a concept map for each chapter that shows the relationships among these ideas. Once the concept maps are created, the authors develop three types of questions designed to test students’ knowledge of each concept.

The question types are designed to help students (1) understand the facts, (2) learn how to apply them, and (3) learn why they are true. By asking students questions that vary in both type and level of difficulty, instructors can gather different types of evidence, which will allow them to more effectively assess how well students understand specific concepts.

Three Knowledge Types

1. Factual questions (ask “What?”)—test declarative knowledge, including textbook definitions and relationships between two or more pieces of information.
2. Applied questions (ask “How?”)—pose problems in a context different from the one in which the material was learned, requiring students to draw from their declarative and procedural understanding of important concepts.
3. Conceptual questions (ask “Why?”)—ask students to draw from their prior experience and use critical-thinking skills to take part in qualitative reasoning about the real world.

Three Difficulty Levels

1. Easy questions—require a basic understanding of the concepts, definitions, and examples presented in the textbook.
2. Moderate questions—direct students to use critical-thinking skills and to demonstrate an understanding of core concepts independent of specific textbook examples.
3. Difficult questions—ask students to synthesize textbook concepts with their own experience, making analytical inferences about economic topics and more.

General Rules for Norton Assessment

1. Each question measures and explicitly links to a specific competency.
2. Questions are written with clear, concise, and grammatically correct language that suits the difficulty level of the specific competency being assessed. To ensure the validity of the questions, no extraneous, ambiguous, or confusing material is included, and no slang expressions are used.
3. In developing the questions, every effort has been made to eliminate bias (e.g., race, gender, cultural, ethnic, regional, handicap, and age) to help with issues of accessibility and validity.
4. Questions require specific knowledge of material studied, not general knowledge or experience.
Reading the Test Item Notation

Five data fields are associated with each question.

- **ANS**: denotes the answer.
- **DIF**: denotes the difficulty level.
- **TOP**: references the topic, taken from the Concept Map, that is tested by the question.
- **REF**: references the text section number where content pertaining to the question can be found.
- **MSC**: denotes the knowledge type tested by the question.
CHAPTER 1  Derivatives and Risk Management

Concept Map

Introduction
Financial Innovation
Traded Derivative Securities
Defining, Measuring, and Managing Risk
The Regulator’s Classification of Risk
Portfolio Risk Management
Corporate Financial Risk Management
Risk Management Perspectives in This Book
Multiple Choice

1. The following is NOT a feature of current derivatives markets:
   a. there is a huge variety in the number and type of derivatives contracts that are traded
   b. the derivatives markets are now global and measured in trillions of dollars
   c. commodity derivatives have emerged as the most popular kind of derivatives traded in the new millennium
   d. colleges and universities now offer many kinds of derivative courses
   e. Wall Street firms hire graduate degree holders in finance and quantitative methods for designing and trading derivatives

   ANS: C   DIF: Easy   TOP: Introduction   REF: 1.1   MSC: Factual

2. A derivative security:
   a. is useful only for speculation
   b. is useful only for hedging
   c. is useful only for manipulating markets
   d. can be used for all of these purposes
   e. is useful for none of these purposes

   ANS: D   DIF: Easy   TOP: Financial Innovation   REF: 1.2   MSC: Factual

3. Foreign exchange prices became volatile during the 1970s mainly because of:
   a. an end of the policy of fixing interest rates by the US Federal Reserve Bank
   b. the demise of the Bretton Woods system of fixed exchange rates
   c. supply shocks of the 1970s
   d. technology that helped us overcome the vagaries of Mother Earth
   e. hedge funds manipulating exchange trades

   ANS: B   DIF: Easy   TOP: Financial Innovation   REF: 1.2   MSC: Factual

4. Interest rates in the United States became volatile during the late 1970s mainly due to:
   a. an end of the policy of fixing interest rates by the US Federal Reserve Bank
   b. the demise of the Bretton Woods system of fixed exchange rates
   c. technological changes that enabled banks to modify interest rates
   d. hedge funds manipulating interest rates


5. The International Monetary Market is:
   a. an OTC market where money market instruments trade
   b. a part of the World Bank that lends funds to developing countries
   c. a division of the Chicago Mercantile Exchange created for trading foreign currency futures
   d. a London-based market for interbank lending
   e. None of these answers are correct.

   ANS: C   DIF: Easy   TOP: Financial Innovation   REF: 1.2   MSC: Factual
6. In the United States, the Great Moderation refers to:
   a. a 15-year-long period that began around 1900 during which the growth of real output fluctuated, inflation declined, stock market volatility was reduced, and business cycles were moderated
   b. the time period between 1920 and 1933 when sale, manufacture, and transportation of alcohol was prohibited
   c. a time period that began in 1955 and lasted for nearly a decade during which business cycle fluctuations declined and inflation was under control
   d. a time period that began after World War II and lasted for nearly a decade during the growth of real output fluctuated, inflation declined, stock market volatility was reduced, and business cycles were moderated
   e. a time period that began during the mid-1980s and lasted a little over two decades during which the growth of real output fluctuated, inflation declined, stock market volatility was reduced, and business cycles were moderated


7. Nobel Prize–winning economist Ronald Coase’s view is:
   a. arbitrage is the adhesive that holds financial markets together
   b. derivatives destroy financial markets via excessive speculation
   c. derivatives improve social welfare through better risk allocation in the economy
   d. firms often appear when they can lower transaction costs
   e. regulations and taxes cause financial innovation

   ANS: D  DIF: Easy  TOP: Financial Innovation  REF: 1.2  MSC: Factual

8. The following was NOT an example cited by Nobel laureate economist Merton Miller in support of his view that “regulations and taxes cause financial innovation”:
   a. Eurobonds
   b. Eurodollars
   c. futures contracts
   d. swaps
   e. zero-coupon bonds

   ANS: C  DIF: Easy  TOP: Financial Innovation  REF: 1.2  MSC: Factual

9. In financial markets, a coupon refers to:
   a. the detachable part of a stock that entitles the holder to get dividends from the company
   b. the interest paid on a bond on a regular basis, typically semiannually
   c. one side of a financial swap that entitles the holder to net payments
   d. the discount from the principal amount at which a zero-coupon bond is sold in the market
   e. a paper on whose submission a trader gets a reduction in brokerage fees

   ANS: B  DIF: Moderate  TOP: Traded Derivative Securities  REF: 1.3  MSC: Factual
10. Who has described derivatives as “time bombs, both for the parties that deal in them and the economic system”?
   a. Warren Buffett
   b. Ronald Coase
   c. Alan Greenspan
   d. Peter Lynch
   e. Merton Miller

   ANS: A    DIF: Easy    TOP: Traded Derivative Securities    REF: 1.3
   MSC: Factual

11. Which of the following statements is INCORRECT?
   a. Derivatives trade in zero net supply markets.
   b. A derivatives trade is a zero-sum game in the absence of market imperfections like transaction costs.
   c. Derivatives are powerful financial tools that can be used for speculation as well as hedging.
   d. Derivatives have a history of always causing significant losses to any trader who trades these contracts.
   e. Derivatives can help traders to reduce price risk from economic activities.

   ANS: D    DIF: Moderate    TOP: Traded Derivative Securities    REF: 1.3
   MSC: Factual

12. Suppose regulators cap the maximum interest one can charge at 5 percent. Let the underlying market interest rate be 8 percent. Charging anything lower will drive you out of business.
    You devise a compensatory balance scheme: for every $100 that the customer borrows, she will have to keep a certain amount with you as a compensatory balance. What should the amount of the loan and the compensatory balance be if the customer wants to borrow $5,000?
   a. $5,000 loan and $1,000 as compensatory balance
   b. $5,000 loan and $1,500 as compensatory balance
   c. $5,000 loan and $3,000 as compensatory balance
   d. $8,000 loan and $3,000 as compensatory balance
   e. $8,000 loan and $5,000 as compensatory balance

   ANS: D    DIF: Difficult    TOP: Traded Derivative Securities    REF: 1.3
   MSC: Applied

13. The Basel Committee’s Risk Management Guidelines for Derivatives (July 1994) did NOT list which of the following risks?
   a. credit risk
   b. legal risk
   c. liquidity risk
   d. market risk
   e. value-at-risk

   ANS: E    DIF: Easy    TOP: The Regulator’s Classification of Risk    REF: 1.5
   MSC: Factual
14. Which of the following risks can be very difficult to hedge?
   a. credit risk
   b. legal risk
   c. market risk
   d. operations risk
   e. portfolio risk

   MSC: Factual

15. Procter & Gamble’s balance sheet suggests that which of the following is NOT a characteristic of the company’s risk exposure or risk management practice?
   a. P&G is exposed to currency risk, interest rate risk, and commodity price risk.
   b. P&G consolidates currency risk, interest rate risk, and commodity price risk, and tries to naturally offset them. It then tries to hedge the residual risk with derivatives.
   c. P&G holds some derivatives for trading purposes and trades them strategically to maximize shareholder value.
   d. P&G monitors derivative positions using techniques including market value, sensitivity analysis, and value-at-risk.
   e. P&G uses interest rate swaps to hedge its underlying debt obligations and enters into certain currency interest rate swaps to hedge the company’s foreign net investments.

   ANS: C  DIF: Moderate  TOP: Corporate Financial Risk Management  REF: 1.7  MSC: Factual

16. Procter & Gamble’s balance sheet suggests that which of the following is NOT a characteristic of the company’s risk exposure or risk management practice?
   a. P&G manufactures and sells its products in many countries. It mainly uses forwards and options to reduce the risk that the company’s financial position will be adversely affected by short-term changes in exchange rates.
   b. P&G uses futures, options, and swaps to manage price volatility of raw materials.
   c. P&G designates a security as a hedge of a specific underlying exposure and monitors its effectiveness in an ongoing manner.
   d. P&G is exposed to significant volatility from commodity hedging activity and credit risk exposure.
   e. P&G grants stock options and restricted stock awards to key managers and directors.

   ANS: D  DIF: Moderate  TOP: Corporate Financial Risk Management  REF: 1.7  MSC: Factual
CHAPTER 2

Interest Rates

Concept Map

Introduction
Rate of Return
Basic Interest Rates: Simple, Compound, and Continuously Compounded
Discounting (PV) and Compounding (FV): Moving Money across Time
US Treasury Securities
US Federal Debt Auction Markets
Different Ways of Investing in Treasury Securities
Treasury Bills, Notes, Bonds, and STRIPS
Libor versus Bbalibor
Multiple Choice

1. A fixed-income security may be defined as:
   a. a security that earns a fixed return
   b. a security that makes interest and principal repayments according to a fixed schedule
   c. a security that is sold at a fixed discount
   d. a security that earns dividends according to a fixed schedule
   e. a security that is sold at a fixed price

   ANS: B    DIF: Easy    TOP: Introduction    REF: 2.1    MSC: Factual

2. Suppose that you bought a stock for $40, received a dividend of $0.50, and sold it for $41 after 91 days. Your annualized arithmetic rate of return equals:
   a. 5.01 percent
   b. 10.03 percent
   c. 15.04 percent
   d. 16.07 percent
   e. None of these answers are correct.

   ANS: C    DIF: Easy    TOP: Rate of Return    REF: 2.2    MSC: Applied

3. Suppose that you are planning to enroll in a master’s program two years in the future. The cost to enroll is $150,000. You expect to have the following funds:

   • From your current job, you can save $5,000 after one year and $7,000 after two years.
   • You expect a year-end bonus of $9,000 after one year and $15,000 after two years.
   • Your grandparents saved money for your education in a tax-favored savings account and will give you $18,000 after one year.
   • Your parents offer you the choice of taking $50,000 at any time, but that amount is deducted from your inheritance. They are risk-averse investors and put money in ultra-safe government bonds giving 2 percent per year.

   The borrowing and the lending rate at the bank is 4 percent per year, compounded daily. Approximating this by continuous compounding, how much money will you need to borrow when you start your master’s degree education two years from today?
   a. $39,489
   b. $40,530
   c. $42,489
   d. $47,501
   e. None of these answers are correct.

   ANS: B    DIF: Difficult    TOP: Rate of Return    REF: 2.2    MSC: Applied
4. The interest rate is 7 percent per year. Compute the eight-month zero-coupon bond price using a compound interest rate with monthly compounding.
   a. $0.9533
   b. $0.9540
   c. $0.9545
   d. $0.9554
   e. None of these answers are correct.
      ANS: C    DIF: Easy    TOP: Basic Interest Rates: Simple, Compound, and Continuously Compounded    REF: 2.3    MSC: Applied

5. The simple interest rate is 5 percent per year. What is the dollar return after nine months?
   a. $1.0312
   b. $1.0375
   c. $1.0381
   d. $1.0450
   e. None of these answers are correct.
      ANS: B    DIF: Easy    TOP: Basic Interest Rates: Simple, Compound, and Continuously Compounded    REF: 2.3    MSC: Applied

The next two questions are based on the following table, where the interest rate is 5 percent per year, compounded once a year.

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<th>Time (in years)</th>
<th>Cash flow (in dollars)</th>
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<tbody>
<tr>
<td>0 (today)</td>
<td>-105</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>106</td>
</tr>
</tbody>
</table>

6. Compute the present value of the above cash flows.
   a. -$3.78
   b. $0.53
   c. $1.06
   d. $1.40
   e. None of these answers are correct.
      ANS: D    DIF: Moderate    TOP: Discounting (PV) and Compounding (FV): Moving Money across Time    REF: 2.4    MSC: Applied
7. Compute the future value of the above cash flows in three years.
   a. $0.05
   b. $1.62
   c. $4.82
   d. $5.68
   e. None of these answers are correct.

   ANS: B  DIF: Moderate  TOP: Discounting (PV) and Compounding (FV): Moving Money across Time  REF: 2.4  MSC: Applied

8. If the price of a zero-coupon bond maturing in three years is $0.90, what is the continuously compounded rate of return?
   a. 0.0351
   b. 0.0426
   c. 0.0542
   d. 0.0744
   e. None of these answers are correct.

   ANS: A  DIF: Moderate  TOP: Discounting (PV) and Compounding (FV): Moving Money across Time  REF: 2.4  MSC: Applied

9. Which of the following is NOT true about US Treasury securities?
   a. These securities are virtually free from default risk.
   b. They trade in a market with some of the smallest bid/ask spreads in the world.
   c. Their interest payments are free from state and local taxes.
   d. They have low minimum denominations and offer a spectrum of maturities that range from one day to thirty years.
   e. They accurately reflect a company’s cost of borrowing.

   ANS: E  DIF: Easy  TOP: US Treasury Securities  REF: 2.5  MSC: Factual

10. A discriminatory auction of US Treasury securities:
    a. raises more revenue than a uniform price auction
    b. raises less revenue than a uniform price auction
    c. raises equal revenue as a uniform price auction
    d. may raise more or less revenues than a uniform price auction
    e. None of these answers are correct.

    ANS: D  DIF: Moderate  TOP: US Federal Debt Auction Markets  REF: 2.6  MSC: Conceptual