

## STUDY SESSION

# 13

## Fixed Income (1)

**T**his study session introduces the unique attributes that define fixed-income securities, then follows with an overview of global debt markets. Primary issuers, sectors, and bond types are explained. Key concepts for the calculation and interpretation of bond prices, yields, and spreads and coverage of interest rate risk and key related risk measures are presented. Securitization—the creation of fixed-income securities backed by certain (typically less liquid) assets—including the various types, characteristics, and risks of these investments end the session.

### READING ASSIGNMENTS

<b>Reading 39</b>	Fixed-Income Securities: Defining Elements by Moorad Choudhry, PhD, FRM, FCSI, and Stephen E. Wilcox, PhD, CFA
<b>Reading 40</b>	Fixed-Income Markets: Issuance, Trading, and Funding by Moorad Choudhry, PhD, FRM, FCSI, Steven V. Mann, PhD, and Lavone F. Whitmer, CFA
<b>Reading 41</b>	Introduction to Fixed-Income Valuation by James F. Adams, PhD, CFA, and Donald J. Smith, PhD
<b>Reading 42</b>	Introduction to Asset-Backed Securities by Frank J. Fabozzi, PhD, CPA, CFA

### LEARNING OUTCOMES

#### READING 39. FIXED-INCOME SECURITIES: DEFINING ELEMENTS

The candidate should be able to:

- a** describe basic features of a fixed-income security;

- b** describe content of a bond indenture;
- c** compare affirmative and negative covenants and identify examples of each;
- d** describe how legal, regulatory, and tax considerations affect the issuance and trading of fixed-income securities;
- e** describe how cash flows of fixed-income securities are structured;
- f** describe contingency provisions affecting the timing and/or nature of cash flows of fixed-income securities and whether such provisions benefit the borrower or the lender.

## **READING 40. FIXED-INCOME MARKETS: ISSUANCE, TRADING, AND FUNDING**

The candidate should be able to:

- a** describe classifications of global fixed-income markets;
- b** describe the use of interbank offered rates as reference rates in floating-rate debt;
- c** describe mechanisms available for issuing bonds in primary markets;
- d** describe secondary markets for bonds;
- e** describe securities issued by sovereign governments;
- f** describe securities issued by non-sovereign governments, quasi-government entities, and supranational agencies;
- g** describe types of debt issued by corporations;
- h** describe structured financial instruments;
- i** describe short-term funding alternatives available to banks;
- j** describe repurchase agreements (repos) and the risks associated with them.

## **READING 41. INTRODUCTION TO FIXED-INCOME VALUATION**

The candidate should be able to:

- a** calculate a bond's price given a market discount rate;
- b** identify the relationships among a bond's price, coupon rate, maturity, and market discount rate (yield-to-maturity);
- c** define spot rates and calculate the price of a bond using spot rates;
- d** describe and calculate the flat price, accrued interest, and the full price of a bond;
- e** describe matrix pricing;
- f** calculate annual yield on a bond for varying compounding periods in a year;
- g** calculate and interpret yield measures for fixed-rate bonds and floating-rate notes;
- h** calculate and interpret yield measures for money market instruments;
- i** define and compare the spot curve, yield curve on coupon bonds, par curve, and forward curve;
- j** define forward rates and calculate spot rates from forward rates, forward rates from spot rates, and the price of a bond using forward rates;
- k** compare, calculate, and interpret yield spread measures.

**READING 42. INTRODUCTION TO ASSET-BACKED SECURITIES**

The candidate should be able to:

- a** explain benefits of securitization for economies and financial markets;
- b** describe securitization, including the parties involved in the process and the roles they play;
- c** describe typical structures of securitizations, including credit tranching and time tranching;
- d** describe types and characteristics of residential mortgage loans that are typically securitized;
- e** describe types and characteristics of residential mortgage-backed securities, including mortgage pass-through securities and collateralized mortgage obligations, and explain the cash flows and risks for each type;
- f** define prepayment risk and describe the prepayment risk of mortgage-backed securities;
- g** describe characteristics and risks of commercial mortgage-backed securities;
- h** describe types and characteristics of non-mortgage asset-backed securities, including the cash flows and risks of each type;
- i** describe collateralized debt obligations, including their cash flows and risks;
- j** describe characteristics and risks of covered bonds and how they differ from other asset-backed securities.