

# STUDY SESSION

# 15

## Fixed Income Basic Concepts

**T**his study session presents the fundamentals of fixed-income investments. Fixed income is one of the largest segments of global financial markets. The first reading introduces elements that define and characterize fixed-income securities. The second reading describes the primary issuers, sectors, and types of bonds. The third reading introduces calculation and interpretation of prices, yields, and spreads for fixed-income securities; market conventions for price/yield calculations and quotations; and spot rates, forward rates, and alternative definitions of a yield curve. The fourth reading focuses on securitization and describes types, characteristics, and risks of asset-backed securities.

### READING ASSIGNMENTS

<b>Reading 51</b>	Fixed-Income Securities: Defining Elements by Moorad Choudhry, PhD, FCSI, FIFS, and Stephen E. Wilcox, PhD, CFA
<b>Reading 52</b>	Fixed-Income Markets: Issuance, Trading, and Funding by Moorad Choudhry, PhD, FCSI, FIFS, Steven V. Mann, PhD, and Lavone F. Whitmer, CFA
<b>Reading 53</b>	Introduction to Fixed-Income Valuation by James F. Adams, PhD, CFA, and Donald J. Smith, PhD
<b>Reading 54</b>	Introduction to Asset-Backed Securities by Frank J. Fabozzi, PhD, CPA, CFA

**LEARNING OUTCOMES****READING 51. 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 identify whether such provisions benefit the borrower or the lender.

**READING 52. 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 short-term funding alternatives available to banks;
- i** describe repurchase agreements (repos) and the risks associated with them.

**READING 53. 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 and interpret yield measures for fixed-rate bonds, floating-rate notes, and money market instruments;
- g** define and compare the spot curve, yield curve on coupon bonds, par curve, and forward curve;

- h** define forward rates and calculate spot rates from forward rates, forward rates from spot rates, and the price of a bond using forward rates;
- i** compare, calculate, and interpret yield spread measures.

## READING 54. 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.