

COURSE: INVESTMENTS | CHAPTER 2

ASSET CLASSES AND FINANCIAL INSTRUMENTS

Chapter Purpose

This chapter introduces the major asset classes and financial instruments available to investors.

Classification

How financial instruments are classified

Money Markets

Characteristics of short-term instruments

Bonds & Equities

Structure of debt and ownership claims

Market Indexes

Benchmarks and market measurement

Derivatives

Contracts based on underlying assets

Alternatives & Trade-offs

Risk, return and liquidity differences

Learning Objectives

By the end of this chapter, students should be able to:

1 Define an asset class

2 Classify major financial instruments

3 Distinguish money from capital markets

4 Explain major money-market securities

5 Describe bond characteristics

6 Explain common and preferred stock

7 Describe financial-market indexes

8 Explain derivative instruments

9 Identify alternative investments

10 Compare risk, return and liquidity

11 Explain the role in diversification

12 Select instruments for objectives

SECTION I

UNDERSTANDING ASSET CLASSES

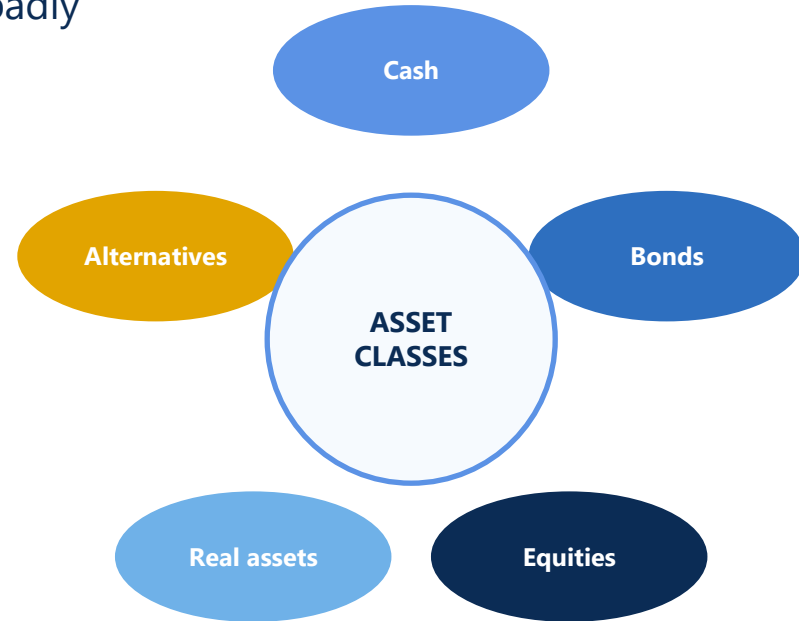
What Is an Asset Class?

An asset class is a group of investments that share broadly similar characteristics.

- Economic characteristics
- Risk characteristics
- Sources of return
- Market behaviour

EXAMPLES

Cash and money-market instruments • Bonds • Equities • Real assets • Alternative investments



Why Asset Classes Matter

Organize

Structure the investment opportunity set

Compare

Assess expected return against risk

Diversify

Build portfolios across return drivers

Match

Align assets with investor objectives

Manage Liquidity

Meet cash needs when they arise

Allocate

Deploy capital strategically over time

Asset allocation begins with understanding the differences among asset classes.

Traditional and Alternative Asset Classes

TRADITIONAL ASSET CLASSES

- Cash
- Money-market instruments
- Bonds
- Equities

ALTERNATIVE ASSET CLASSES

- Real estate
- Commodities
- Private equity
- Hedge funds
- Infrastructure

Financial Instrument Classification

Financial instruments can broadly be classified into three families.

DEBT SECURITIES

The investor becomes a creditor of the issuer and holds a contractual claim.

EQUITY SECURITIES

The investor becomes an owner with a residual claim on the business.

DERIVATIVE SECURITIES

Value depends on an underlying asset, rate, index or variable.

Money Market vs. Capital Market

Money Market: primarily short-term debt securities. **Capital Market:** longer-term debt and equity instruments.

Money Market	Capital Market
Short maturity	Longer maturity
Mainly debt instruments	Debt and equity
Generally more liquid	Liquidity varies
Usually lower volatility	Potentially greater volatility

Maturity is the primary dividing line: money markets manage liquidity, capital markets fund long-term growth.

SECTION II

MONEY-MARKET INSTRUMENTS

What Is the Money Market?

The money market deals mainly in short-term debt instruments.

Short Maturity

Typically one year or less

High Liquidity

Readily converted into cash

Low Price Volatility

Limited sensitivity to rate moves

Liquidity Management

Primary purpose for most holders

Why Investors Use Money-Market Instruments

Temporary Cash Investment

Earn a return on idle balances

Emergency Reserves

Funds available at short notice

Capital Preservation

Protect nominal principal

Short-Term Income

Modest but predictable yield

Liquidity Management

Match near-term obligations

Parking Funds

Hold before long-term commitment

Treasury Bills

Treasury bills are short-term debt securities issued by government.

- Short maturity
- Usually issued at a discount
- Repaid at face value
- Often highly liquid
- Generally low credit risk in the issuing government's currency

T-BILL AT A GLANCE

Issuer

Government

Return form

Discount to face value

Typical role

Liquidity reserve

Treasury Bill Example

An investor purchases a Treasury bill at a discount and is repaid face value at maturity.



ETB 100,000 – ETB 96,000 = ETB 4,000. The return is the difference between purchase price and maturity value.

Certificates of Deposit

A Certificate of Deposit (CD) is a bank deposit with a specified maturity.

Fixed Term

Funds committed for a set period

Specified Rate

Interest agreed at issue

Principal Repayment

Deposit returned at maturity

Bank Credit Quality

Return depends on issuing bank

Commercial Paper

Commercial paper is short-term unsecured debt issued by corporations.

COMMON USES

- Working capital
- Inventory financing
- Receivables financing
- Short-term operating requirements

RISK

Because it is unsecured, the risk of commercial paper depends strongly on the creditworthiness of the issuing corporation.

Bankers' Acceptances

A bankers' acceptance is a time draft whose payment is supported or guaranteed by a bank.

International Trade

Settles obligations between distant counterparties

Import Financing

Supports payment for goods purchased abroad

Export Financing

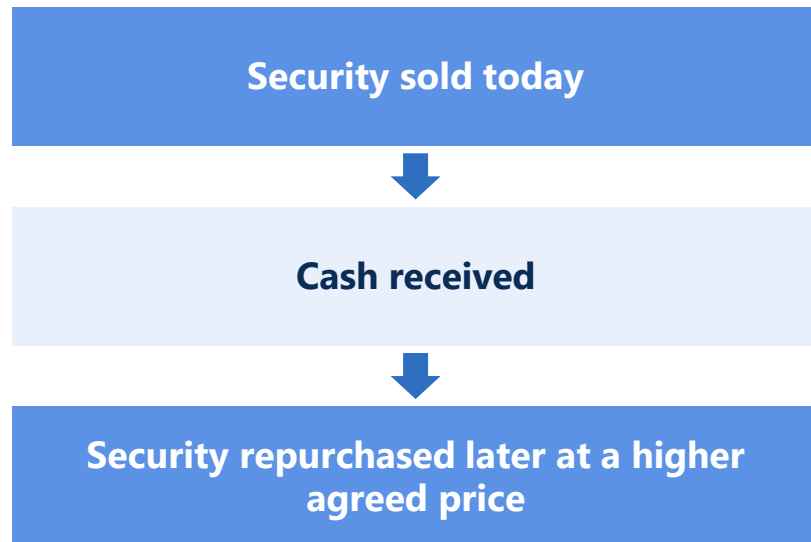
Provides the exporter with a bank-backed claim

The bank's guarantee converts a commercial obligation into a marketable, higher-quality instrument.

Repurchase Agreements

A repurchase agreement (repo) is effectively collateralized short-term financing.

- Securities serve as collateral
- Typically very short maturities
- Widely used by financial institutions
- Price difference represents the financing cost



Comparing Money-Market Instruments

Instrument	Typical Issuer / Party	Main Characteristic
Treasury Bill	Government	Short-term sovereign debt
Certificate of Deposit	Bank	Time deposit with fixed maturity
Commercial Paper	Corporation	Unsecured short-term debt
Bankers' Acceptance	Bank-supported trade instrument	Trade finance
Repurchase Agreement	Financial institutions	Collateralized financing

All share short maturity and a liquidity-management purpose; they differ mainly in issuer and credit support.

SECTION III

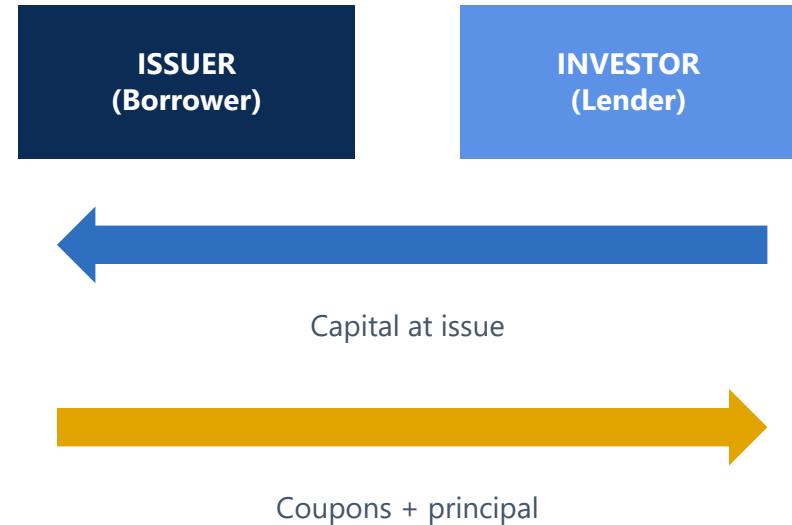
BONDS AND FIXED-INCOME SECURITIES

What Is a Bond?

A bond is a debt security representing a contractual obligation of the issuer.

THE ISSUER GENERALLY PROMISES

- Periodic interest payments
- Repayment of principal
- Payment according to specified terms



Basic Bond Terminology

Face / Par Value

Amount generally repaid at maturity

Coupon Rate

Contractual interest rate on par value

Maturity

Date the principal becomes due

Market Price

Current trading price of the bond

Yield

Return implied by price and cash flows

Issuer Credit

Ability and willingness to pay as promised

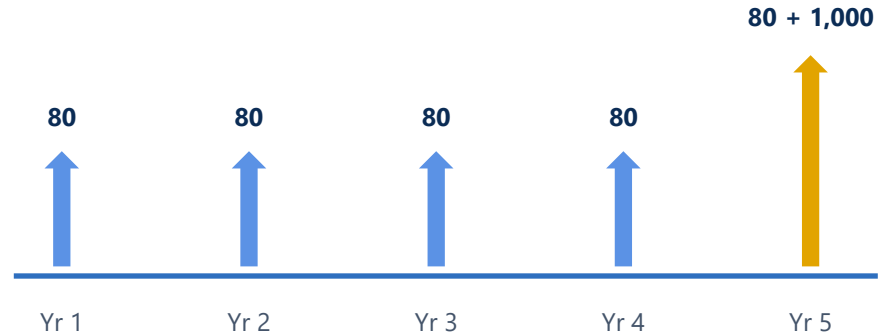
Bond Cash-Flow Example

Face value ETB 1,000 with an 8% annual coupon rate.

ANNUAL COUPON

$$1,000 \times 8\% = \text{ETB } 80$$

- ETB 80 received annually as coupon income
- ETB 1,000 principal repaid at maturity
- Assumes no default by the issuer



Coupon timeline — annual payments plus principal at maturity

Government Bonds

WHY GOVERNMENTS ISSUE BONDS

- Finance budget deficits
- Fund infrastructure
- Support public expenditure
- Refinance existing debt

WHAT DRIVES INVESTOR RISK

- Creditworthiness of the issuer
- Currency of issuance
- Maturity
- Inflation
- Interest-rate movements

Corporate Bonds

Corporations issue bonds to fund long-term activity and manage their capital structure.

Expansion

Growth into new markets or capacity

Capital Expenditure

Plant, equipment and technology

Acquisitions

Purchase of other businesses

Refinancing

Replace maturing or costlier debt

Long-Term Investment

Projects with multi-year payback

Credit Risk

Typically higher than high-quality sovereign debt

Other Bond Categories

Depending on the market, the bond universe may also include:

Municipal / Subnational

Issued by regional or local authorities

International Bonds

Issued or traded across borders

Foreign-Currency Bonds

Denominated in another currency

Convertible Bonds

Convertible into equity on set terms

Callable Bonds

Issuer may redeem before maturity

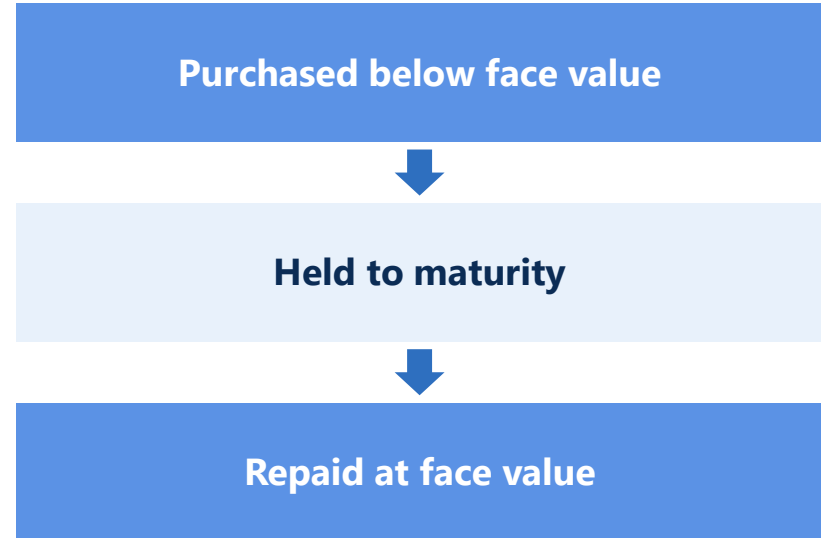
Zero-Coupon Bonds

No periodic interest payments

Zero-Coupon Bond

A zero-coupon bond generally makes no periodic coupon payments.

- Return comes primarily from price appreciation toward par
- No reinvestment of interim coupons
- Price is typically more sensitive to interest-rate changes



Convertible Bond

A convertible bond gives the investor an option, subject to specified terms, to convert the bond into equity.

DEBT CHARACTERISTICS

- Contractual coupon payments
- Claim ahead of shareholders
- Principal repayment if not converted

EQUITY-RELATED OPTIONALITY

- Right to convert into shares
- Participation in share-price upside
- Conversion terms fixed at issue

It combines characteristics of debt with equity-related optionality.

Major Bond Risks

Interest-Rate Risk

Prices fall when market rates rise

Credit Risk

Issuer may fail to pay as promised

Inflation Risk

Real value of fixed payments erodes

Reinvestment Risk

Coupons reinvested at lower rates

Liquidity Risk

Difficult to sell at a fair price

Currency Risk

Adverse exchange-rate movements

Call Risk

Bond redeemed early by the issuer

Interest Rates and Bond Prices

A fundamental relationship in fixed income: bond prices and market interest rates move in opposite directions.

Market interest rates RISE



Existing bond prices FALL

Market interest rates FALL



Existing bond prices RISE

The longer the maturity, the more sensitive the price is to a given change in interest rates.

SECTION IV

EQUITY SECURITIES

What Is Common Stock?

Common stock represents an ownership interest in a corporation.

Voting Rights

A voice in corporate decisions

Dividend Rights

A share of profits when declared

Residual Claim

Claim on assets after all creditors

Capital Appreciation

Potential gain from share-price growth

Sources of Equity Return

Shareholder return has two components.

DIVIDEND INCOME

Cash distributed to shareholders when declared

CAPITAL GAIN OR LOSS

Change in the market price of the shares

$$\text{Total Return} = \text{Dividend Yield} + \text{Capital Gain / Loss Yield}$$

Common Stock Return Example

PURCHASE PRICE

ETB 200

SALE PRICE

ETB 230

DIVIDEND

ETB 10

$$R = (230 - 200 + 10) \div 200$$

Total Return = 20%

Risks of Common Stock

Market Risk

Broad market declines

Business Risk

Operating performance falls short

Financial Risk

Leverage magnifies outcomes

Liquidity Risk

Thin trading in the shares

Political Risk

Policy and regulatory change

Currency Risk

Exchange-rate exposure

Company-Specific Risk

Events unique to the firm

Preferred Stock

Preferred stock has characteristics of both equity and debt-like securities.

Stated Dividend

Usually fixed at issue

Dividend Priority

Paid before common shareholders

Liquidation Priority

Ranks ahead of common equity

Limited Voting

Usually restricted voting rights

Common vs. Preferred Stock

Common Stock	Preferred Stock
Residual ownership claim	Priority over common equity
Dividends variable	Often a stated dividend
Usually voting rights	Usually limited voting
Greater growth potential	More income-oriented
Higher upside and downside	More stable contractual features

Common shares reward growth; preferred shares emphasise income and priority of claim.

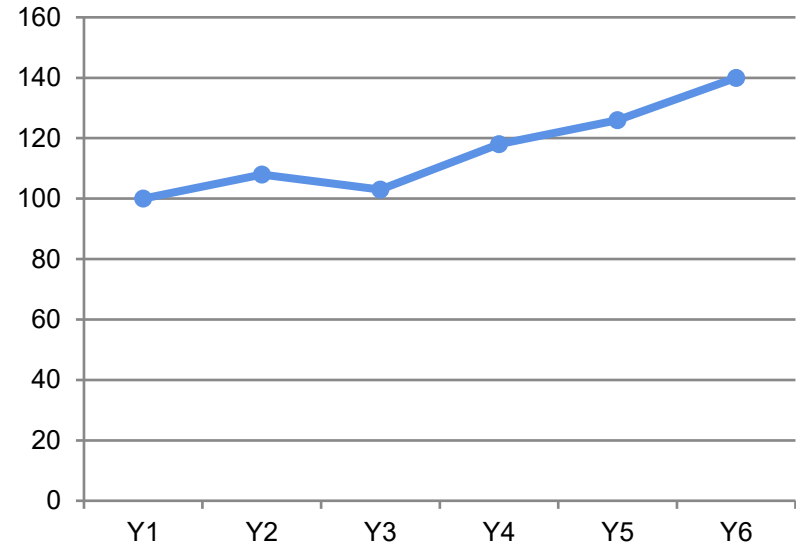
SECTION V

MARKET INDEXES

What Is a Market Index?

A market index measures the performance of a selected group of securities.

- Track market movements
- Benchmark portfolios
- Compare investment performance
- Construct index funds
- Analyse market trends



Major Equity Index Examples

S&P 500

United States — broad large-cap

Dow Jones Industrial Average

United States — price-weighted

Nasdaq Composite

United States — technology-heavy

FTSE 100

United Kingdom — large-cap

Nikkei 225

Japan — price-weighted

MSCI World

Global developed markets

Different indexes represent different markets and use different construction methods.

Index Construction Methods

PRICE WEIGHTED

Higher-priced shares receive more influence on the index level.

MARKET-CAP WEIGHTED

Larger companies by market value receive greater weight.

EQUAL WEIGHTED

Each security in the index receives the same weight.

Construction method shapes what the index actually measures — and how a portfolio benchmarked to it should be built.

Market Capitalization

$$\text{Market Capitalization} = \text{Share Price} \times \text{Shares Outstanding}$$

SHARE PRICE

ETB 50

SHARES OUTSTANDING

10 million

MARKET CAP

ETB 500m

ETB 50 × 10,000,000 = ETB 500 million — market capitalization measures the market value of a company's equity.

Bond Market Indexes

Bond indexes track segments of the fixed-income market and serve as portfolio benchmarks.

Government Bonds

Sovereign issuance benchmarks

Corporate Bonds

Investment-grade company debt

High-Yield Debt

Lower-rated, higher-yielding issues

International Bonds

Cross-border and multi-currency

Broad Fixed Income

Aggregate market coverage

Benchmark Use

Measure bond portfolio performance

SECTION VI

DERIVATIVE SECURITIES

What Is a Derivative?

A derivative is a financial contract whose value depends on an underlying asset, rate, index or variable.

Options

A right, not an obligation, to transact

Futures

Standardised exchange-traded obligation

Forwards

Customised bilateral agreement

Swaps

Exchange of cash-flow streams

Common Underlying Assets

Derivatives may be based on a wide range of underlying exposures.

- Stocks
- Bonds
- Interest rates
- Currencies
- Commodities
- Market indexes



Options

An option provides a right, but not an obligation, to transact according to specified terms.



CALL OPTION

The right to BUY the underlying asset at the agreed price



PUT OPTION

The right to SELL the underlying asset at the agreed price

Futures Contracts

A futures contract obligates the parties to buy or sell an underlying asset according to specified future terms.

Commodities

Energy, metals and agriculture

Currencies

Exchange-rate exposures

Interest Rates

Short- and long-term rate contracts

Equity Indexes

Broad market exposure

Why Investors Use Derivatives

HEDGING

Reduce exposure to an unwanted risk such as price, rate or currency movement.

SPECULATION

Take deliberate risk in search of profit from an expected price move.

ARBITRAGE

Exploit pricing inconsistencies between related markets or instruments.

The same instrument can reduce or increase risk — the purpose depends entirely on how it is used.

Hedging Example

SCENARIO An importer expects to pay USD 100,000 in three months.

CONCERN

The foreign currency may appreciate, raising the local-currency cost of the payment.

ACTION

Use an appropriate currency derivative to fix or limit the future exchange rate.

OUTCOME

Exchange-rate uncertainty around the payment is reduced.

SECTION VII

ALTERNATIVE INVESTMENTS

What Are Alternative Investments?

Alternative investments are assets outside traditional publicly traded stocks, bonds and cash.

Real Estate

Property held for income and growth

Commodities

Physical goods and related contracts

Private Equity

Stakes in unlisted companies

Hedge Funds

Flexible, strategy-driven vehicles

Infrastructure

Long-life essential assets

Common Traits

Often less liquid, less transparent

Real Estate

POTENTIAL BENEFITS

- Rental income
- Capital appreciation
- Diversification
- Potential inflation sensitivity

KEY RISKS

- Illiquidity
- Maintenance costs
- Market cycles
- Financing risk

Commodities

Gold

Oil

**Agricultural
commodities**

Industrial metals

Diversification

Return drivers differ from stocks and bonds

Inflation Sensitivity

Prices often respond to inflationary pressure

Portfolio Hedging

May offset specific input-cost exposures

Commodity prices can be highly volatile and are driven by supply, demand and global conditions.

Private Equity

Private equity involves investment in companies not publicly traded on stock exchanges.

Long Horizon

Capital committed for many years

Limited Liquidity

No ready secondary market

Active Ownership

Investors influence management

Due Diligence

Intensive analysis before investing

Return Potential

High potential return with high risk

Access

Typically institutional or qualified investors

Hedge Funds

Hedge funds may employ flexible strategies across markets and instruments.

- Long/short investing
- Leverage
- Derivatives
- Arbitrage
- Global macro strategies



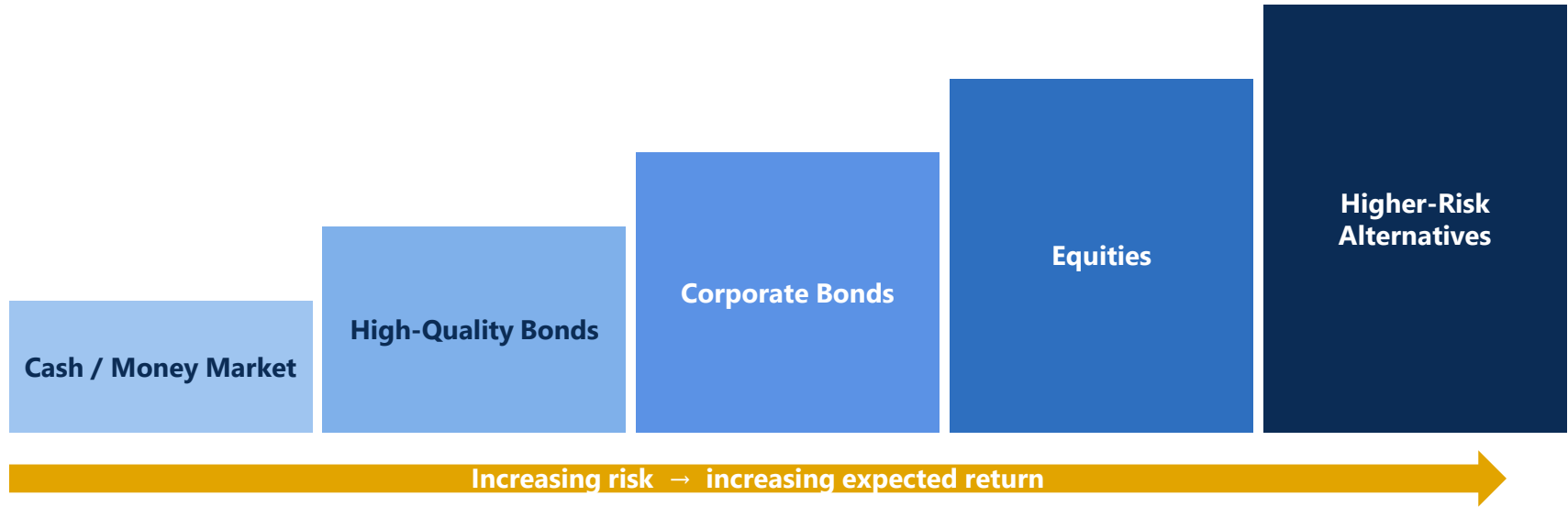
Risk, fees, liquidity and transparency can vary substantially.

SECTION VIII

COMPARING ASSET CLASSES

Risk–Return Spectrum

Conceptually, expected return rises as risk rises — but actual outcomes remain uncertain.



Liquidity Spectrum

GENERALLY MORE LIQUID

- Cash
- Money-market instruments
- Actively traded listed securities

POTENTIALLY LESS LIQUID

- Thinly traded securities
- Direct real estate
- Private equity
- Some alternative strategies

More liquid → less liquid

Asset-Class Comparison

Asset Class	Return Potential	Risk	Liquidity	Horizon
Cash / Money Market	Low	Low	High	Short
Bonds	Low–Moderate	Low–Moderate	Moderate–High	Medium
Equities	Moderate–High	High	High in active markets	Long
Real Estate	Moderate	Moderate	Low	Long
Private Equity	High potential	High	Very low	Long
Derivatives	Varies	Can be very high	Varies	Varies

No asset class dominates on every dimension — trade-offs drive allocation decisions.

Choosing Among Asset Classes

Expected return

Risk

Liquidity

Investment horizon

Income requirements

Inflation exposure

Tax considerations

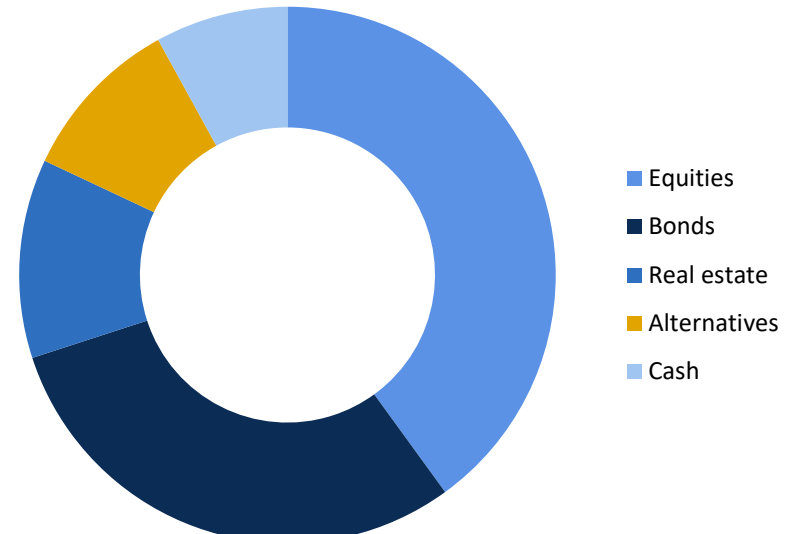
Diversification benefits

Personal constraints

Asset Classes and Diversification

Different asset classes may respond differently to changing economic conditions.

- Economic growth
- Inflation
- Interest rates
- Market sentiment
- Currency movements



Combining assets with imperfectly correlated returns can reduce overall portfolio risk.

Practical Portfolio Exercise

ETB
2,000,000
Capital

40
Age

15 years
Horizon

Moderate
Risk tolerance

**Growth +
Income**
Objective

AVAILABLE ASSETS

- Money market
- Government bonds
- Corporate bonds
- Equities
- Real estate
- Alternatives

STUDENT TASKS

- Recommend an asset allocation
- Explain the role of each asset class
- Identify liquidity needs
- Explain expected risk–return trade-offs
- Explain diversification benefits

Key Takeaways

- Asset classes group investments with similar characteristics
- Instruments are classified as debt, equity or derivatives
- Money-market instruments are primarily short-term debt
- T-bills, CDs, commercial paper and repos support liquidity
- Bonds represent creditor claims on the issuer
- Common shares represent ownership claims
- Preferred shares combine equity and debt-like features

- Market indexes provide benchmarks of market performance
- Derivatives derive value from underlying assets or variables
- Alternatives broaden the investment opportunity set
- Asset classes differ in risk, return, liquidity and horizon
- Diversification depends on imperfectly correlated returns
- Selection should reflect objectives, constraints and risk tolerance

NEXT CHAPTER

CHAPTER 3 — SECURITIES MARKETS

- Primary and secondary markets
- IPOs and seasoned offerings
- Private placements
- Investment banking and underwriting
- Stock exchanges and dealer markets
- Electronic trading
- Market, limit and stop orders
- Bid–ask spreads
- Margin trading and short selling
- Trading costs and securities regulation

THANK YOU

Questions and Discussion

Dr Abenet Yohannes, Ph.D.

abenetyohannes@gmail.com

abenetyohannes.com