Portfolio Management

Portfolio Management Overview

Exam Focus

- Portfolio management process
- Types of investors
- Types of pension plans
- Asset management industry
- Pooled investments

Portfolio Approach

- Portfolio perspective
    - Risk and return
- Diversification ratio
    - Risk reduction

Diversification Ratio: Example

- Average standard deviation of returns for *n* stock is 20%
- Average standard deviation of returns for an equally weighted portfolio of the *n* stocks is 15%
- Diversification ratio =

Portfolio Management Process

- Planning
  - Investment policy statement
- Execution
  - Top-down analysis
  - Bottom-up analysis
- Feedback
  - Rebalance

Portfolios: Example

Portfolios are *most likely* to provide?

A. Risk reduction.
B. Risk elimination.
C. Downside protection.

-1

Source: CFA Institute. Used with permission.

Portfolio Selection: Example

Portfolio	Equity %	Fixed Income %	Alternative Investments %
1	55	35	10
2	45	50	5
3	65	20	15

Which of these portfolios is *most likely* suitable for a low-risk-tolerant investor?

A. Portfolio 1.
B. Portfolio 2.
C. Portfolio 3.

-1

Types of Investors

- Individual investors
- Institutions
- Banks
- Insurance companies
- Investment companies
- Sovereign wealth funds

Characteristics of Different Types of Investors

Investor	Risk Tolerance	Investment Horizon	Liquidity Needs	Income Needs
Individuals	Depends	Depends	Depends	Depends
Banks	Low	Short	High	Pay interest
Insurance	Low	Long—life Short—P&C	High	Low
Defined pension plans	High	Long	Low	Depends on age

Types of Investors: Example

Which of the following investors will *most likely* have the shortest time horizon?

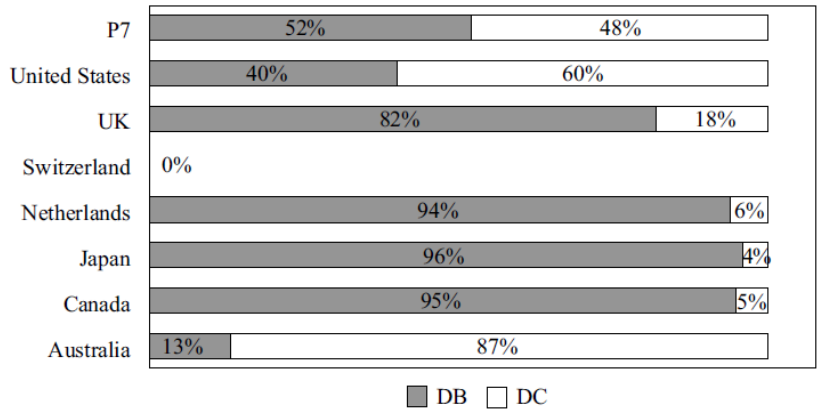
A. Endowments.
B. Life insurance companies.
C. Banks.

-1

Types of Pension Plans

- Defined contribution
  - Employer does not promise benefit
  - Employee bears investment risk
- Defined benefit
  - Employer promises benefit
  - Employer bears investment risk

Pension Plan Type by Geography



Notes: "P7" represents the combination of the seven countries listed. No data were available for Switzerland for this study.

Sources: Willis Towers Watson and secondary sources.

Asset Management Industry

- Buy-side firms
- Sell-side firms
- Asset managers
- Multi-boutique firm
- Robo-advisors

Types of Pooled Investments

- Mutual funds
- Exchange-traded funds (ETFs)
- Separately managed accounts
- Hedge funds
- Private equity funds
- Venture capital funds

Exchange-Trade Funds: Example

Which of the following statements regarding exchange-traded funds (ETFs) is *least accurate*? ETFs:

A. are usually passively managed.
B. may trade at prices significantly different from their net asset values.
C. may produce less capital gains liability than open-end index funds.

-1

Solutions

Diversification Ratio: Example

- Average standard deviation of returns for *n* stock is 20%
- Average standard deviation of returns for an equally weighted portfolio of the *n* stocks is 15%
- Diversification ratio = 15% / 20% = 0.75

Portfolios: Example

Portfolios are *most likely* to provide?

A. Risk reduction.
B. Risk elimination.
C. Downside protection.

Combining assets into a portfolio should reduce the portfolio's volatility. However, the portfolio approach does not necessarily provide downside protection or eliminate all risk.

-1

Portfolio Selection: Example

Portfolio	Equity %	Fixed Income %	Alternative Investments %
1	55	35	10
2	45	50	5
3	65	20	15

Which of these portfolios is *most likely* suitable for a low-risk-tolerant investor?

A. Portfolio 1.
B. Portfolio 2.
C. Portfolio 3.

Portfolio 2 has the least exposure to equities and alternative investments when compared to the other two portfolios. These two asset classes generally exhibit greater volatility than fixed income.

-1

Types of Investors: Example

Which of the following investors will *most likely* have the shortest time horizon?

A. Endowments.

B. Life insurance companies.

C. Banks.

Banks need adequate liquidity to meet investor withdrawals. Endowments and life insurance companies have long-term investment horizons.

-1

Exchange-Trade Funds: Example

Which of the following statements regarding exchange-traded funds (ETFs) is *least accurate*? ETFs:

A. are usually passively managed.

B. may trade at prices significantly different from their net asset values.

C. may produce less capital gains liability than open-end index funds.

ETFs are designed to keep their market prices close to their net asset values. ETFs are most often invested to match a particular index (passively managed). ETFs may produce less capital gains liability compared to open-end index funds because investor sales of ETF shares do not require the fund to sell any securities.

-1