

# Asset Allocation

## Chapter 2



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### Financial Plan Preliminaries

#### Insurance

- Life insurance
  - Term life insurance - Provides death benefit only. Premium could change every renewal period
  - Universal and variable life insurance – provide cash value plus death benefit

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### Financial Plan Preliminaries

#### Insurance

- Health insurance
- Disability insurance
- Automobile insurance
- Home/rental insurance
- Liability insurance

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## **Financial Plan Preliminaries**

### Cash reserve

- To meet emergency needs
- Includes cash equivalents (liquid investments)
- Equal to six months living expenses recommended by experts

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## **Individual Investor Life Cycle**

- Accumulation phase

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## **Individual Investor Life Cycle**

- Accumulation phase – early to middle years of working career
- Consolidation phase

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## Individual Investor Life Cycle

- Accumulation phase – early to middle years of working career
- Consolidation phase – past midpoint of careers. Earnings greater than expenses
- Spending/Gifting phase

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## Individual Investor Life Cycle

- Accumulation phase – early to middle years of working career
- Consolidation phase – past midpoint of careers. Earnings greater than expenses
- Spending/Gifting phase – begins after retirement

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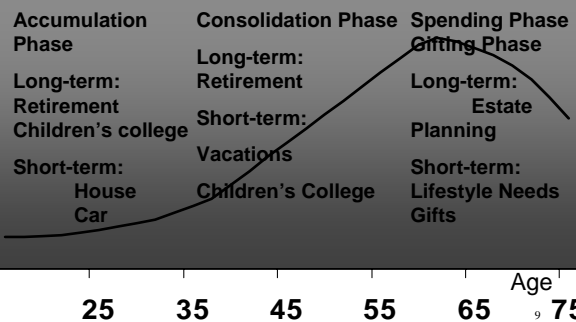
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## Individual Investor Life Cycle

Net Worth Exhibit 2.1




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## Life Cycle Investment Goals

- Near-term, high-priority goals
- Long-term, high-priority goals
- Lower-priority goals

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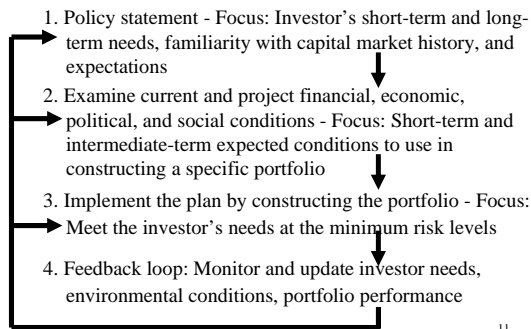
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Exhibit 2.2

## The Portfolio Management Process



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## The Portfolio Management Process

1. Policy statement
  - specifies investment goals and acceptable risk levels
  - should be reviewed periodically
  - guides all investment decisions

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**The Portfolio Management Process**

- 2. Study current financial and economic conditions and forecast future trends
  - determine strategies to meet goals
  - requires monitoring and updating

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**The Portfolio Management Process**

- 3. Construct the portfolio
  - allocate available funds to minimize investor's risks and meet investment goals

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**The Portfolio Management Process**

- 4. Monitor and update
  - evaluate portfolio performance
  - Monitor investor's needs and market conditions
  - revise policy statement as needed
  - modify investment strategy accordingly

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### **The Need For A Policy Statement**

- Helps investors understand their own needs, objectives, and investment constraints
- Sets standards for evaluating portfolio performance
- Reduces the possibility of inappropriate behavior on the part of the portfolio manager

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### **Constructing A Policy Statement**

#### **Questions to be answered:**

- What are the real risks of an adverse financial outcome, especially in the short run?
- What probable emotional reactions will I have to an adverse financial outcome?
- How knowledgeable am I about investments and the financial markets?

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### **Constructing A Policy Statement**

- What other capital or income sources do I have? How important is this particular portfolio to my overall financial position?
- What, if any, legal restrictions may affect my investment needs?
- What, if any, unanticipated consequences of interim fluctuations in portfolio value might affect my investment policy?

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## Investment Objectives

- Risk Tolerance
- Absolute or relative percentage return
- General goals

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## Investment Objectives

### General Goals

- Capital preservation
  - minimize risk of real loss
- Capital appreciation
  - Growth of the portfolio in real terms to meet future need
- Current income
  - Focus on generating income rather than capital gains
- Total return
  - Increase portfolio value by capital gains and by reinvesting current income
  - Maintain moderate risk exposure

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## Investment Constraints

- Liquidity needs
  - Vary between investors depending upon age, employment, tax status, etc.
- Time horizon
  - Influences liquidity needs and risk tolerance

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## Investment Constraints

- **Tax concerns**
  - Capital gains or losses vs income
  - Taxable vs tax free investments
  - Contributions to retirement accounts
  - Tax deferral

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## Equivalent Taxable Yield

$$ETY = \frac{\text{Municipal Yield}}{1 - \text{Marginal Tax Rate}}$$

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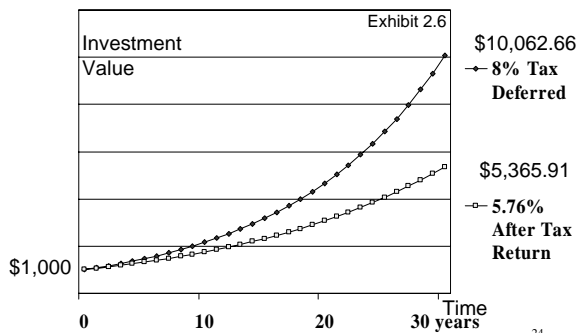
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## Effect of Tax Deferral on Investor Wealth over Time



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## Methods of Tax Deferral

- Contributions to Retirement Accounts
  - Tax on returns deferred until withdrawal

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## Legal and Regulatory Factors

- Limitations or penalties on withdrawals
- Fiduciary responsibilities -
  - “prudent man” rule
- Investment laws prohibit insider trading

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## Unique Needs and Preferences

- Personal preferences such as socially conscious investments could influence investment choice
- Time constraints or lack of expertise for managing the portfolio may require professional management
- Large investment in employer’s stock may require consideration of diversification needs
- Institutional investors needs

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### **Constructing the Policy Statement**

- Objectives - risk and return
- Constraints - liquidity, time horizon, tax factors, legal and regulatory constraints, and unique needs and preferences
- Developing a plan depends on understanding the relationship between risk and return and the the importance of diversification

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### **The Importance of Asset Allocation**

- An investment strategy is based on four decisions
  - What asset classes to consider for investment
  - What normal or policy weights to assign to each eligible class
  - Determining the allowable allocation ranges based on policy weights
  - What specific securities to purchase for the portfolio

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### **The Importance of Asset Allocation**

- According to research studies, most (85% to 95%) of the overall investment return is due to the first two decisions, not the selection of individual investments

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### Returns and Risk of Different Asset Classes (1926-2001)

Series	Geometric Mean	Arithmetic Mean	Standard Deviation
Large Cap	10.7%	12.7%	20.2%
Small Cap	12.5%	17.3%	33.2%
LT Corp.	5.8%	6.1%	8.6%
LT Gov.	5.3%	5.7%	9.4%
Interm. Gov.	5.3%	5.5%	5.7%
T-Bill	3.8%	3.9%	3.2%
Inflation	3.1%	3.1%	4.4%

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### Returns and Risk of Different Asset Classes

- Historically, small company stocks have generated the highest returns. But the volatility of returns have been the highest too
- Inflation and taxes have a major impact on returns
- Returns on Treasury Bills have barely kept pace with inflation

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### Returns and Risk of Different Asset Classes

- Measuring risk by probability of **not** meeting your investment return objective indicates risk of equities is small and that of T-bills is large because of their differences in expected returns
- Focusing only on return variability as a measure of risk ignores reinvestment risk

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## Returns, Taxes and Inflation (1926-2001)

	Before Taxes and Inflation	After Taxes	After Taxes and Inflation
Common Stock	10.7%	7.9%	4.7%
LT Gov. Bond	5.3%	3.7%	0.6%
T-Bill	3.8%	2.7%	-0.4%
Municipal Bond	6.0%	6.0%	2.9%

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## Asset Allocation and Cultural Differences

- Social, political, and tax environments influence the asset allocation decision
- Equity allocations of U.S. pension funds average 58%
- In the United Kingdom, equities make up 78% of assets
- In Germany, equity allocation averages 8%
- In Japan, equities are 37% of assets

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## Summary

- Identify investment needs, risk tolerance, and familiarity with capital markets
- Identify objectives and constraints
- Enhance investment plans by accurate formulation of a policy statement
- Focus on asset allocation as it determines long-term returns and risk

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## **Appendix**

### **Objectives and Constraints of Institutional Investors**

#### **Mutual Funds**

- pool investors funds and invests them in financial assets as per its investment objective

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#### **Pension Funds**

- Receive contributions from the firm, its employees, or both and invests those funds
- **Defined Benefit** – promise to pay retirees a specific income stream after retirement
- **Defined Contribution** – do not promise a set of benefits. Employees' retirement income is not an obligation of the firm

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#### **Endowment Funds**

- They represent contributions made to charitable or educational institutions

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## Insurance Companies

### • Life Insurance Companies

- earn rate in excess of actuarial rate
- growing surplus if the spread is positive
- fiduciary principles limit the risk tolerance
- liquidity needs have increased
- tax rule changes

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## Insurance Companies

### • Nonlife Insurance Companies

- cash flows less predictable
- fiduciary responsibility to claimants
- Risk exposure low to moderate
- liquidity concerns due to uncertain claim patterns
- regulation more permissive

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## Banks

- Must attract funds in a competitive interest rate environment
- Try to maintain a positive difference between their cost of funds and their return on assets
- Need substantial liquidity to meet withdrawals and loan demands
- Face regulatory constraints

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