



Private Wealth Management The Portfolio Management Process

Portfolio Management
for Financial Advisors

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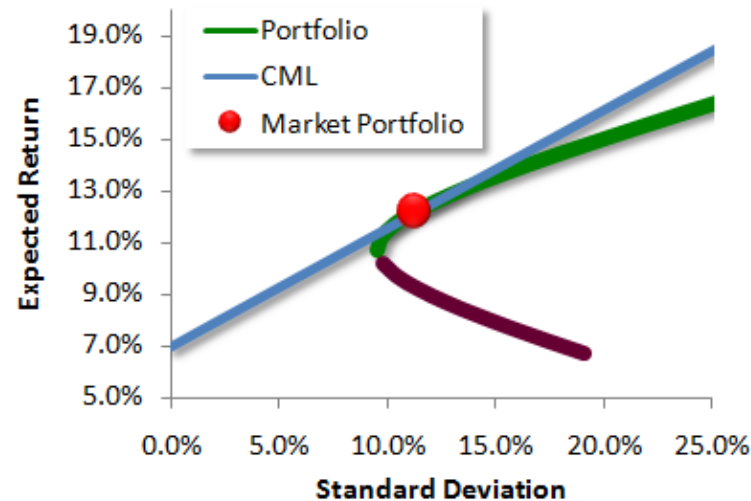
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Short Review

Capital Market Line (CML)*

- A line used in the capital asset pricing model to **illustrate the rates of return for efficient portfolios** depending on **the risk-free rate of return** and **the level of risk** (standard deviation) for a particular portfolio
- The CML is derived by drawing a tangent line from the intercept point on the efficient frontier to the point where the expected return equals the risk-free rate of return



*Sources:
www.investopedia.com
www.bionicturtle.com

Short Review

Capital Asset Pricing Model (CAPM)*

- A model that describes the relationship between **risk** and **expected return** and that is used in the pricing of risky securities.

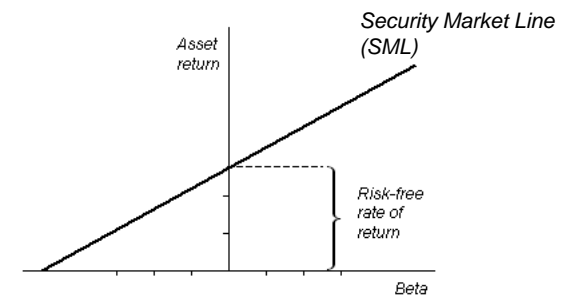
$$R_a = R_f + \beta_a(R_m - R_f)$$

R_a – Expected return on the capital asset

R_f – Risk free rate

β_a – Beta of the security

R_m – Expected market return



- The general idea behind CAPM is that investors need to be compensated in two ways: **time value of money** and **risk**
 - The time value of money is represented by the risk-free rate (R_f) in the formula and compensates the investors for placing money in any investment over a period of time.
 - The other half of the formula represents risk and calculates the amount of compensation the investor needs for taking on additional risk. This is calculated by taking a risk measure (β_a) that compares the returns of the asset to the market over a period of time and to the market premium ($R_m - R_f$).

*Sources: www.investopedia.com

Short Review

Sharp Ratio

- A ratio developed by Nobel laureate William F. Sharpe to measure risk-adjusted performance
- The Sharpe ratio is calculated by subtracting the risk-free rate (such as that of the 10-year U.S. Treasury bond) from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio returns
- The Sharpe ratio formula is:

$$\text{SHARPE RATIO} = \frac{\bar{r}_p - r_f}{\sigma_p}$$

Where:

\bar{r}_p = Expected portfolio return

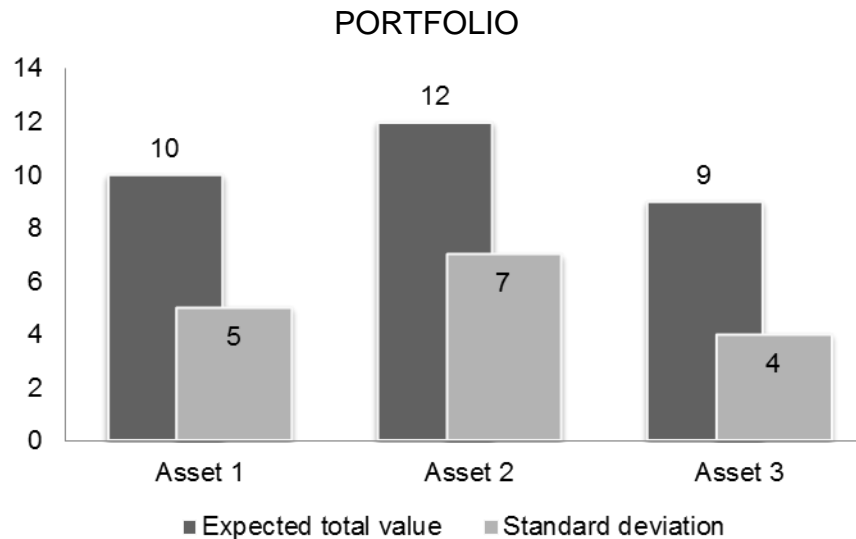
r_f = Risk free rate

σ_p = Portfolio standard deviation

*Sources:
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Short Review

- All assets interdependent in the portfolio (interrelated parts of a whole)



- Based on Modern Portfolio Management by Markowitz and his successors

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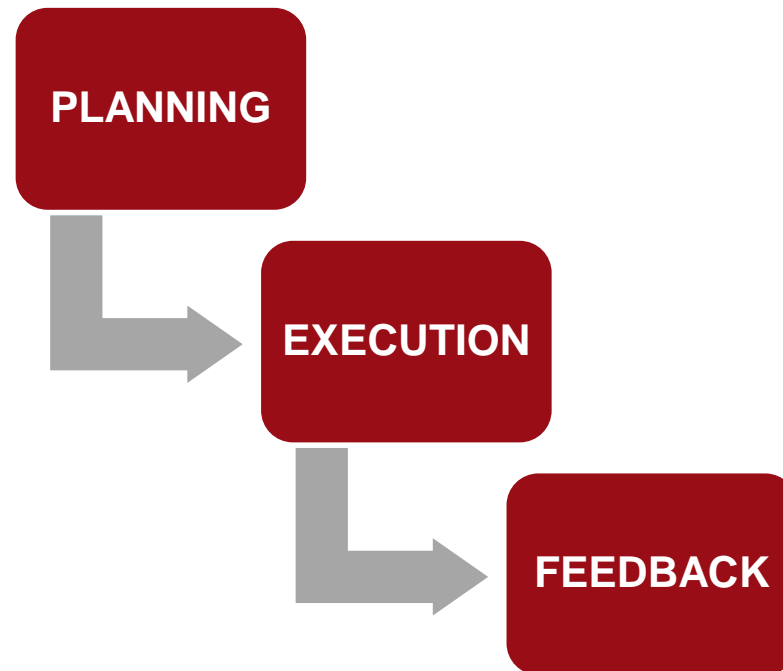
5) Tax Constraints

6) Legal and Regulatory Constraints

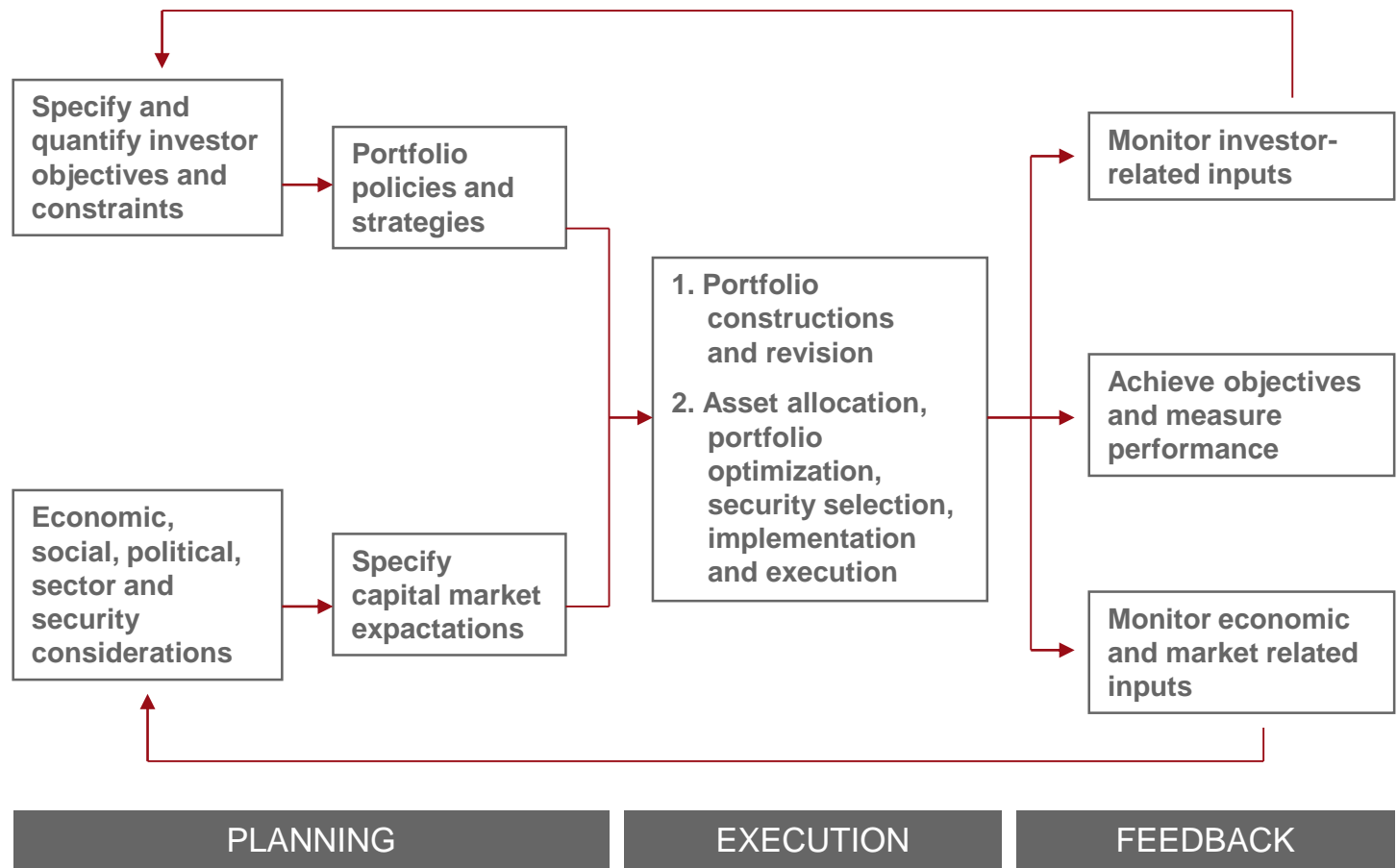
7) Unique Constraints

The Portfolio Management Process

The three steps in the portfolio management process are:



The Portfolio Management Process





The Portfolio Management Process

Construct a statement of **objectives** and **constraints**

- Risk and return objectives: achievable and consistent
- Constraints - internal (client imposed) or external (non-client imposed) constraints and considerations that must be observed in the portfolio

RISK/RETURN OBJECTIVES:

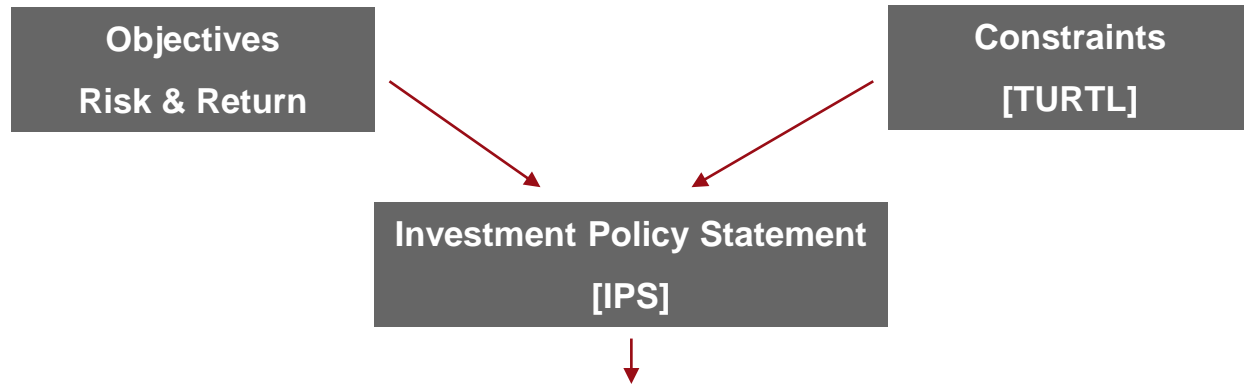
- Risk - the return volatility that the investor is both willing and able to tolerate
- Return - the realistic goal based on the amount of risk that the investor is willing and able to assume.

CONSTRAINTS:

- **T**ime Horizon
- **U**nique Needs and Circumstances
- **R**egulatory/Legal
- **T**axes
- **L**iquidity

The Portfolio Management Process

Planning Step – Execution Step – Feedback Step



- **Written planning document that controls all investments decision-making concerning the portfolio**
- For many portfolios stating objectives and constraints is sufficient
- For other portfolios additional relevant information may be included:
 - A client description and background
 - The purpose of the IPS as relevant to the client
 - The duties of all participants in the investment process
 - A Statement of Objectives and Constraints
 - Any asset allocation considerations relevant to the portfolio
 - Specific guidelines for rebalancing the portfolio as client or market circumstances change

The Portfolio Management Process

Planning Step – *Execution Step* – *Feedback Step*

Select an investment strategy



CLASSES OF STRATEGIES



Passive Investment Approach

- Assets not adjusted for changes in market expectations
- Indexing to a benchmark
- Buy and hold portfolio



Active Investment Approach

- Assets adjusted to capitalize on changing expectations; Indexing to a benchmark
- Positive alpha (risk – adjusted return) over the benchmark



Semi-Active Investment Approach

- Limited use of changes in market expectations
- enhanced indexing (limited deviations)

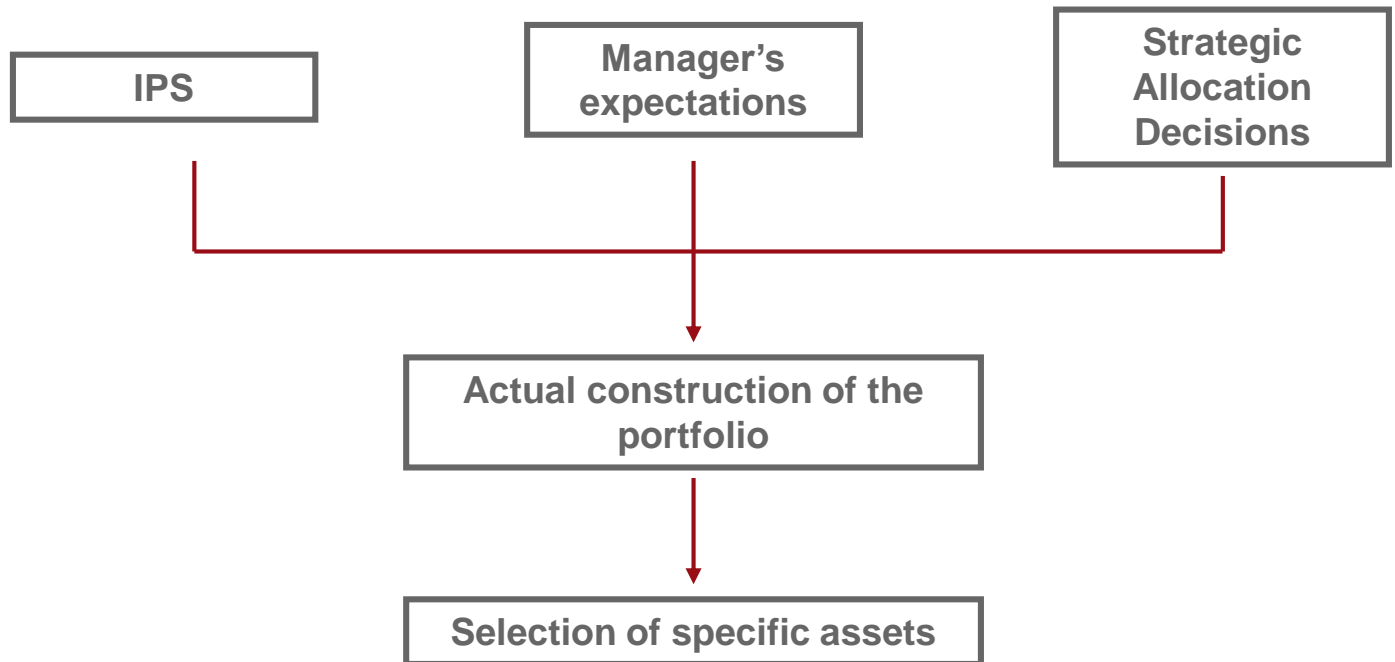
The Portfolio Management Process

Planning Step – Execution Step – Feedback Step

- Selecting a style for equity selection: value vs. growth
- Specify long-term capital market expectations
- Finally, combine **IPS** with elements of **market expectations**
- **Strategic asset allocation:**
 - Major asset classes
 - Exposure limits to meet long-run objectives given client's constraints and realistic market expectations for risk and return (often minimum/maximum allowable allocations)

The Portfolio Management Process

Planning Step – *Execution Step* – *Feedback Step*



**Temporary deviation might be allowed to exploit a particular insight
(Tactical Allocation)**

The Portfolio Management Process

Planning Step – Execution Step – Feedback Step

- Actual execution - portfolio implementation

! NOTE !

Cost of trade (transaction costs) can not exceed benefits of implementing the trades.

- Transaction costs

Explicit costs	Implicit costs
<ul style="list-style-type: none">• commissions• tax effects	<ul style="list-style-type: none">• bid-asked spreads• missed-trade opportunity costs (trades that one never completed due to changes in security prices subsequent to the initial trade order)



The Portfolio Management Process

*Planning Step – Execution Step – **Feedback Step***

1. MONITORING AND REBALANCING:

Continual review of elements of the IPS and capital market expectations to determine:

- 1) if any have changed to a degree sufficient to warrant rebalancing the portfolio
- 2) if there are no changes in above elements to address shifting allocations in portfolio due to changing security prices

2. PERFORMANCE EVALUATION:

- 1) Performance measurement of the actual returns achieved by the portfolio
- 2) Performance attribution to determine the factors that caused the portfolio to perform as it did
- 3) Performance appraisal to determine the success or failure of the manager relative to the client's goals
- 4) A determination of the sources of return
- 5) Performance presentation

Summary

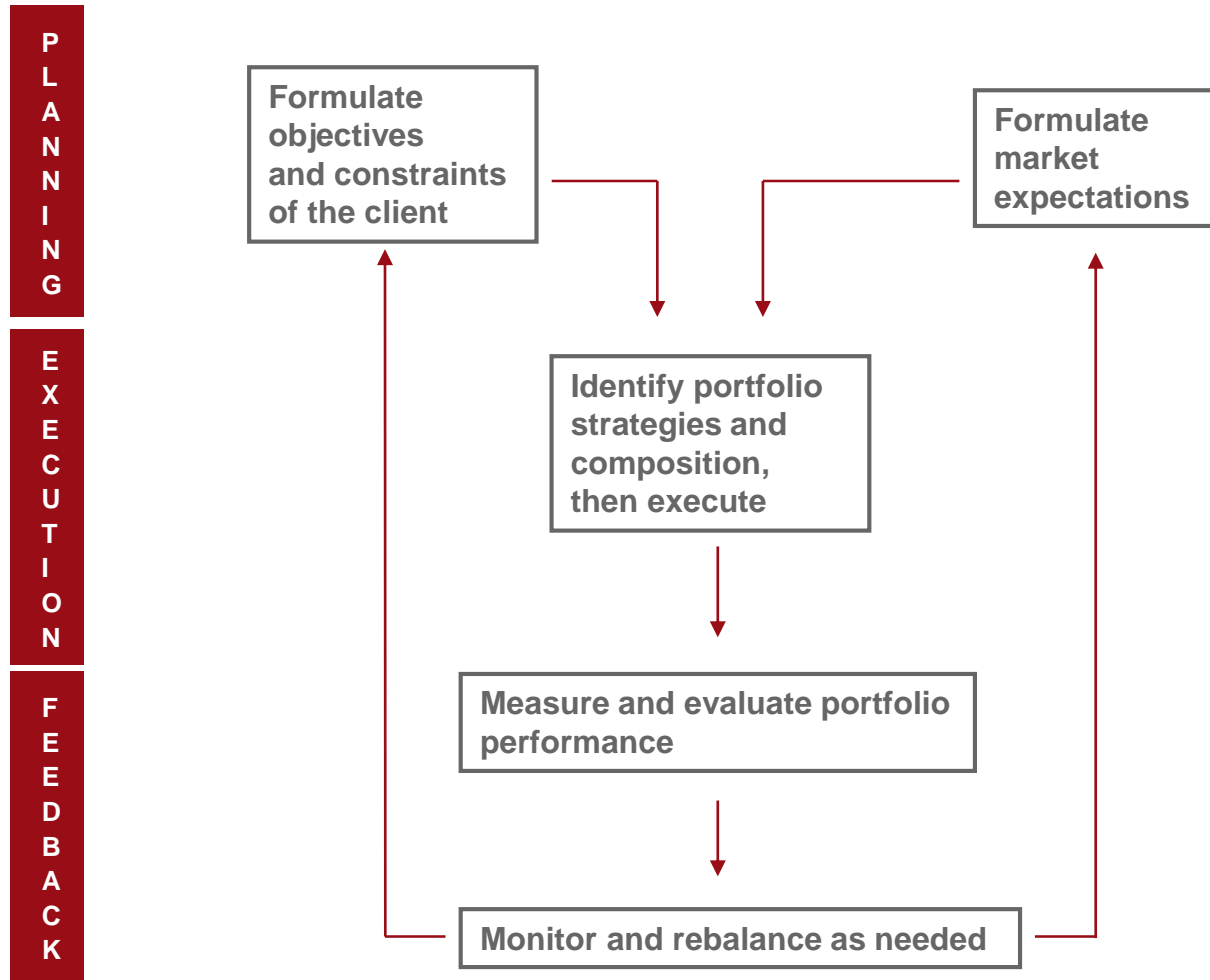


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Objective and Constraints

1) The Risk Objective:

- Must be specific, measurable, **consistent with the return objective**
- The way in which it is measured should be relevant to the client (absolute vs relative terms; variance, standard deviation, semi-variance, Value at Risk)
- **Both client's willingness** (desire to accept risk) **and ability** (spending needs, client's wealth, his overall financial situation) taken under consideration
- When willingness and ability conflict, manager works with client to determine objective
- May include determining investor's risk tolerance (capacity to bear risk)



Objective and Constraints

2) The Return Objective:

- Must be **consistent with the risk objective**
- Stated in a specific, measurable form relevant to the client and the portfolio
- Determining the measurement of the return (and whether it is nominal or real return, pre-tax or post tax)
- Must consider investor's stated return desire (which can be unrealistic) and required return (average return needed to meet the minimum goals)
- If above mentioned factors conflict, are inconsistent with the risk objective or are unrealistic, manager must educate and work with client



Objective and Constraints

3) The Liquidity Constraint

- Liquidity is cash needed from the portfolio in excess of cash contributions into portfolio other savings by the client
- Cash needed can be anticipated or unanticipated; regular and recurring or one-time need
- Cash flow generated from:
 - Cash equivalents - investments due within one year or maturing when cash flow need is anticipated
 - Liquidating portfolio assets - it creates price risk and risk of timing problems (manager cannot always control the timing of the need of liquidity)

! NOTE !

When liquidity needs are high relative to portfolio assets, portfolio must be managed with lower risk



Objective and Constraints

4) The Time Horizon:

- **Period over which an investment objective is to be achieved**
- Usually constrains the ability of portfolio to take risk
- Time horizons of 10 to 20 years are considered long term, those of less than couple years - short term
- **Time horizon affects the portfolio assets allocation**

! NOTE !

Portfolios with long time horizons should allocate only small part of capital in cash equivalents



Objective and Constraints

5) Tax Constraint:

- Tax liabilities constrain and reduce cash flow available to pay out income
- Managers should consider effects of taxes on:
 - Investment income
 - Capital gains
 - Wealth transfers

! NOTE !

If an investor is currently in a high tax bracket as a result of his income, it may be important to focus on investments that would not make the investor's situation worse, like investing more heavily in tax-deferred investments



Objective and Constraints

6) Legal and Regulatory Constraints:

- The manager must be knowledgeable and comply with all governmental, legal, and regulatory requirements
- Legal and regulatory factors can act as an investment constraint and must be considered

EXAMPLE

A trust could require that no more than 10% of the trust be distributed each year. Legal and regulatory constraints such as this one often can't be changed and must not be overlooked.



Objective and Constraints

7) Unique Constraints:

- Additional factors that could bear on portfolio and should be documented in the statement of objectives and constraints include:
 - Specific securities to avoid or other preferences
 - Relevant health issues of the client
 - Objectives that are stated in more than one currency
 - As yet unresolved conflicts and inconsistencies between the risk and return objectives, clients portfolio expectations and constraints.

EXAMPLE

An example of a unique circumstance would be the constraint an investor might place on investing in any company that is not socially responsible, such as a tobacco company.



THANK YOU!