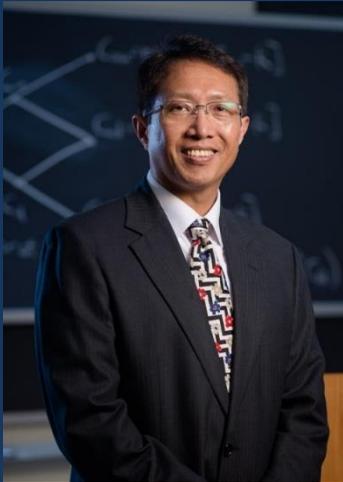


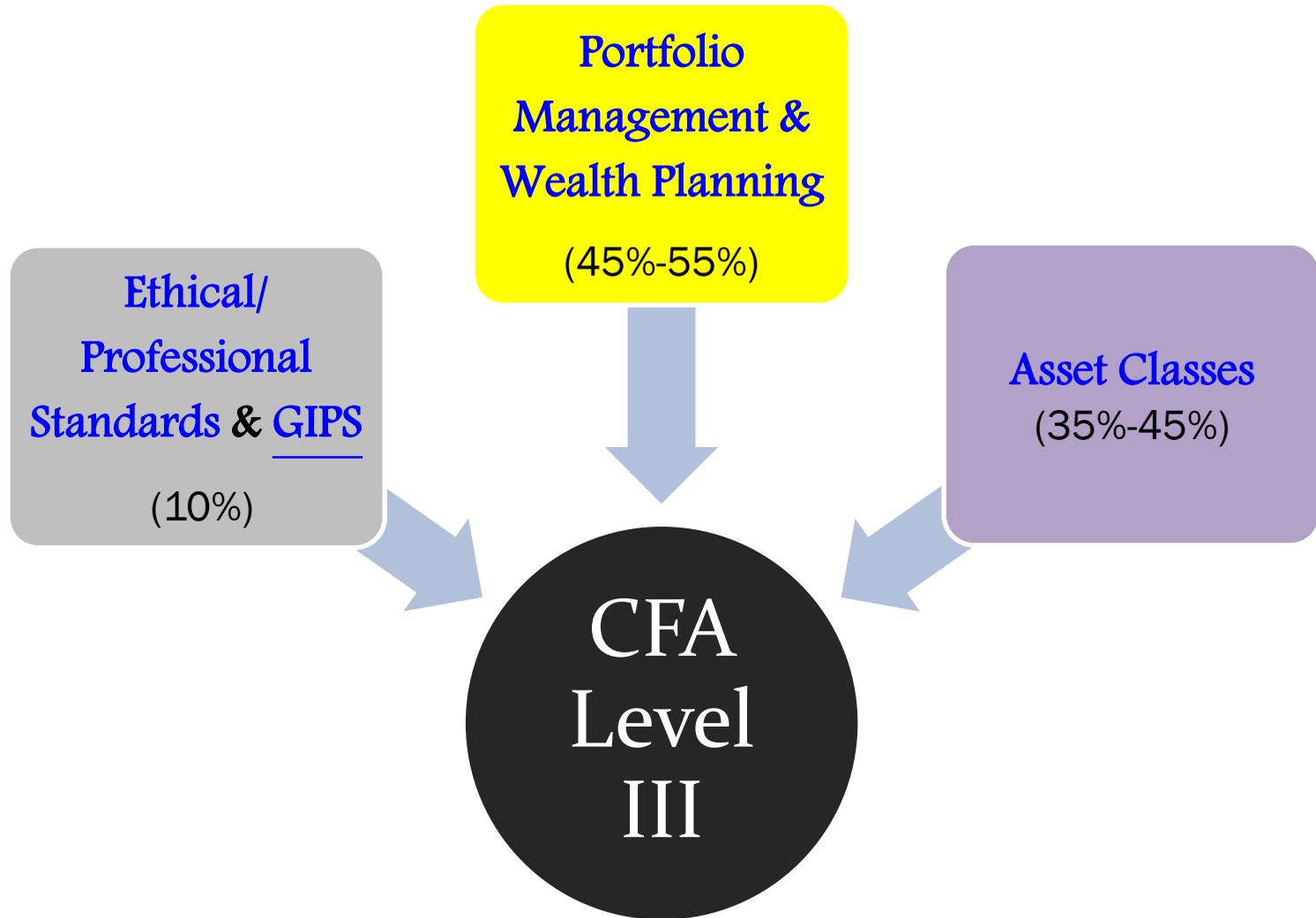
An Overview of CFA Level III



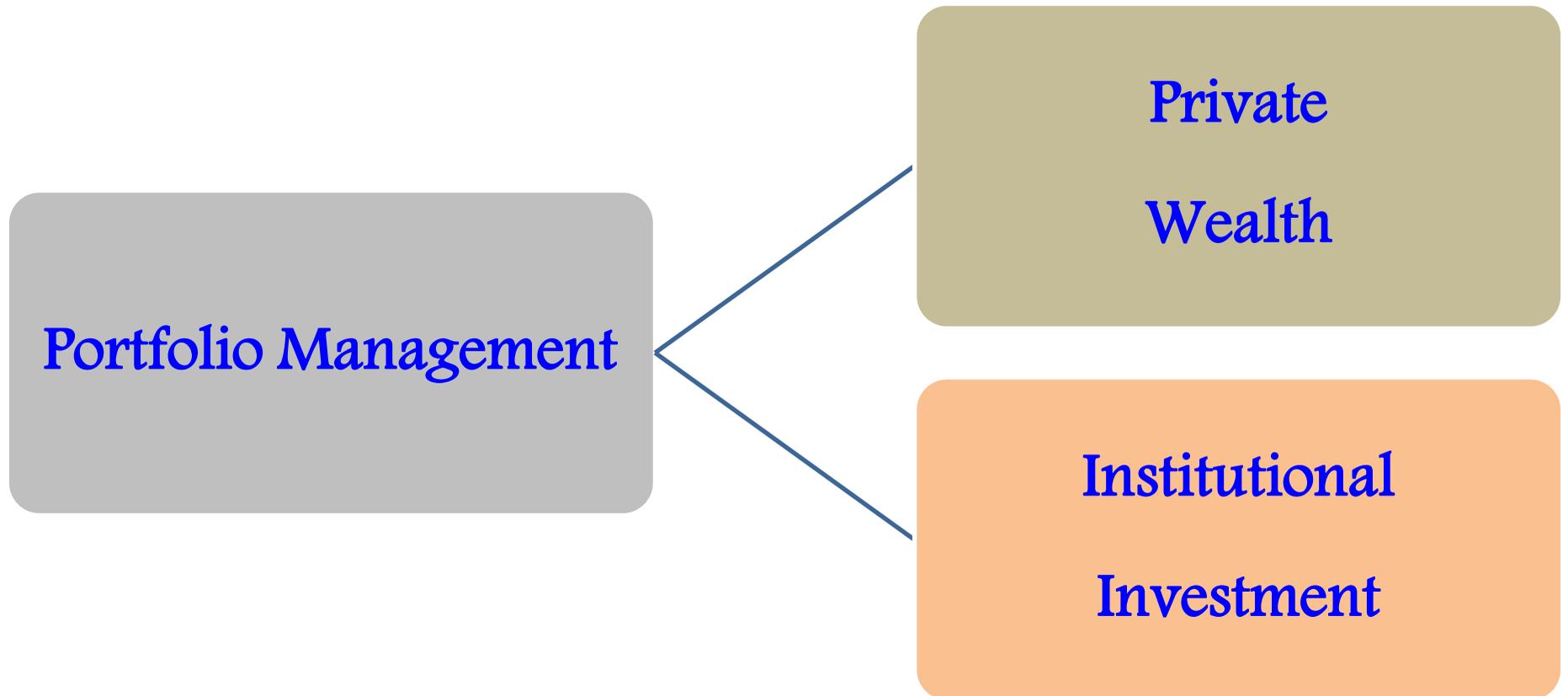
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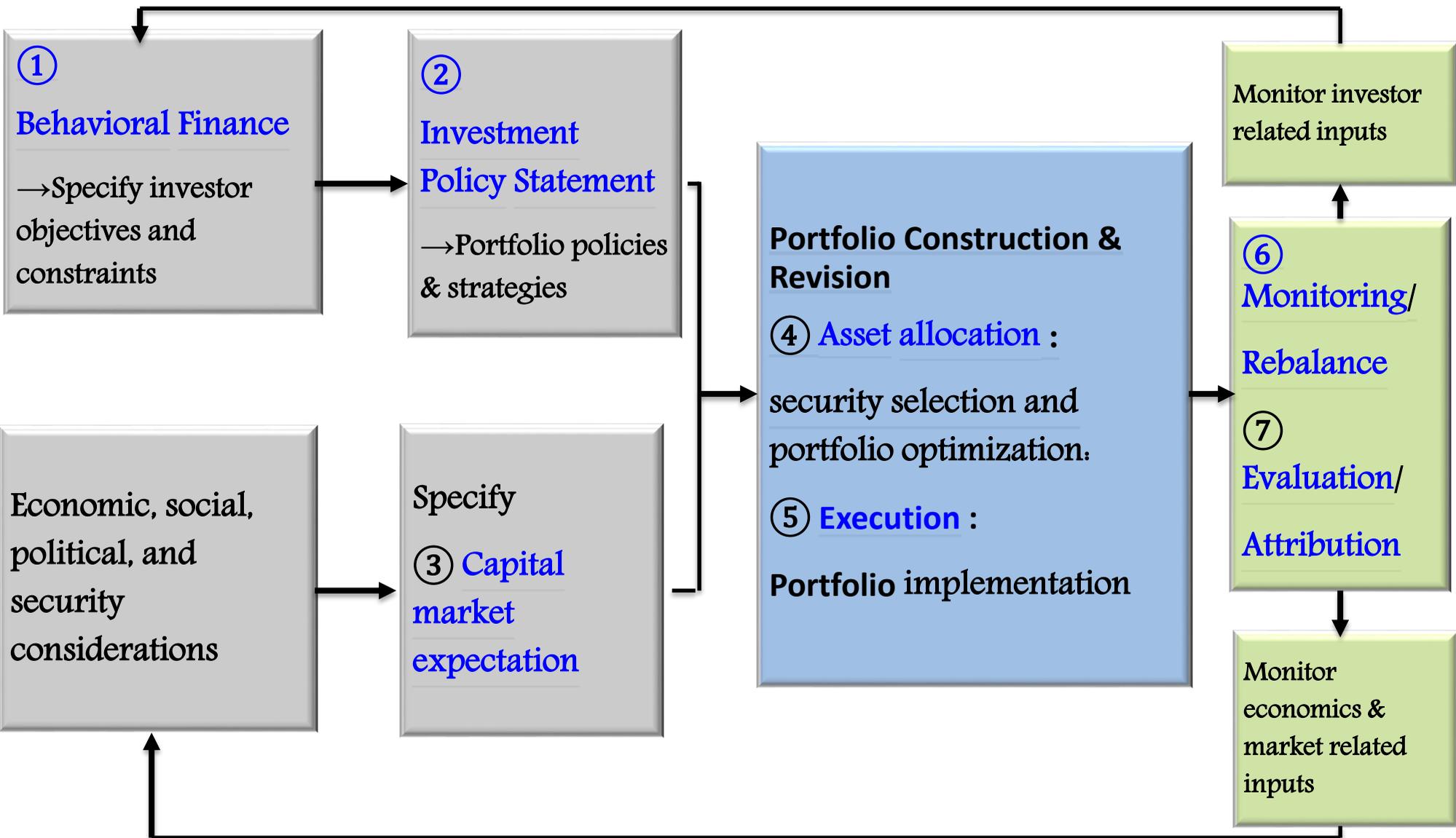
CBOK of CFA Level III



Portfolio Management & Wealth Planning



The Portfolio Management (ongoing) Process



Planning
Stage

周昆教授 CFA 知识系列讲座

Execution
Stage

Feedback
Stage

Behavioral Finance

Given a scenario, be able to identify the behavioral phenomenon	Be able to compare/contrast behavioral biases
Understand difference between cognitive and Emotional behavioral biases	Understand implications for individual and professional investors
Be able to relate behavioral characteristics to level of risk aversion	Identify and explain the impacts of the client's behavioral characteristics and how they conflict with Modern Portfolio Theory

Behavioral Bias of Individual Investors

<i>Cognitive Errors</i>		<i>Emotional Biases</i>
<i>Ability limitations on information Processing</i>		<i>Feeling & Intuition</i>
<u>Belief Perseverance</u> 1. Conservatism 2. Confirmation 3. Representativeness 4. Illusion of Control 5. Hindsight	<u>Information Process</u> 1. Anchoring & Adjustment 2. Mental Accounting 3. Framing 4. Availability	1. <i>Loss-aversion</i> 2. Overconfidence 3. Self-control 4. Status Quo 4.1 <i>Endowment</i> 4.2 <i>Regret-aversion</i>

Private Wealth Management

Prepare and/or critique an Investment Policy Statement (IPS)	Taxes and estate planning
Select the best asset allocation for the client	Concentrated Single Asset Positions
Mortality tables	Life Time Financial Advice

Investment Policy Statement

RRLTTRU

for both Private Wealth and Institutional Investment

Return Objective

Taxes

Risk Tolerance

Regulatory

Liquidity

Unique Circumstances

Time Horizon

Return Objective

Statement in words:

e.g.

- To **generate sufficient** (after taxed) return to meet on going **liquidity needs**.
- To keep **real value** of the portfolios.
- To generate (before or after taxed) required return for both current and **future needs**.

Required Return Calculation

(on immediate time horizon):

- After-tax **ROR** (No end of period target)
- **IRR** based on Time value of money with end of period target
- Time value of money – nothing needs inflation adjustment
- **Pre-tax required return given after-tax data**

Risk Tolerance

Willingness	Ability
<ul style="list-style-type: none">• Interpret from direct statement• Situation profiling• Utility adjusted returns• Consider behavioral biases	<ul style="list-style-type: none">• Based on before-tax Liquidity (income) needs• Based on current wealth level.• Consider behavioral biases
<p>Overall statement – more conservative of two defend.</p>	

Liquidity

Ongoing Needs	One Time/Occasional
<ul style="list-style-type: none">• Living Expenses• Healthcare/Nursing Care• Child care and education	<ul style="list-style-type: none">• Home purchase• Charitable contribution• Emergency spending needs

Time Horizon

- Single Period vs. Multi-periods
- Pre-retirement vs. Post-retirement
- Pre-college, during college and post-college time length

Taxes

- Calculation of after-tax return based on **different taxes** from incomes and/or investment gains.
- Tax consequences in managing **concentrated positions**
- Tax consequence of **foreign** situated **assets** and **foreign-sourced income**

Regulatory

- Prudent investor rule
- Trusts

Institutional Investment Management

- Prepare and critique **IPS** for each type of institutional investors
- Compare and contrast different type of institutional investors
- Asset allocation, performance evaluation, risk management for different type of institutional investors

➤ **Define Benefit Plan**

➤ **Life Insurance**

➤ **Foundations**

➤ **Nonlife Insurance**

➤ **Endowment**

➤ **Bank**

Capital market Expectations

Formulating capital market expectations	Business Cycles , inflation , and portfolio returns
Forecasting Tools	Economic Forecasting
Economic Growth Factor	Application to asset selections and allocation

Asset Allocation

Strategic asset allocation	Corner Portfolios
Methods of asset allocation	Capital Allocation Line
Objective Specification	Black-Litterman model & Resampling methods
Defining asset classes	Asset allocation characteristics for different type of investors
Mean-Variance Optimization	Tactical asset allocation

Execution

How to execute portfolio decisions?	Implementations Shortfall and VWAP
Market structure	Major types of traders
Market quality	Trading tactics
Measuring execution costs	Ethic in trading

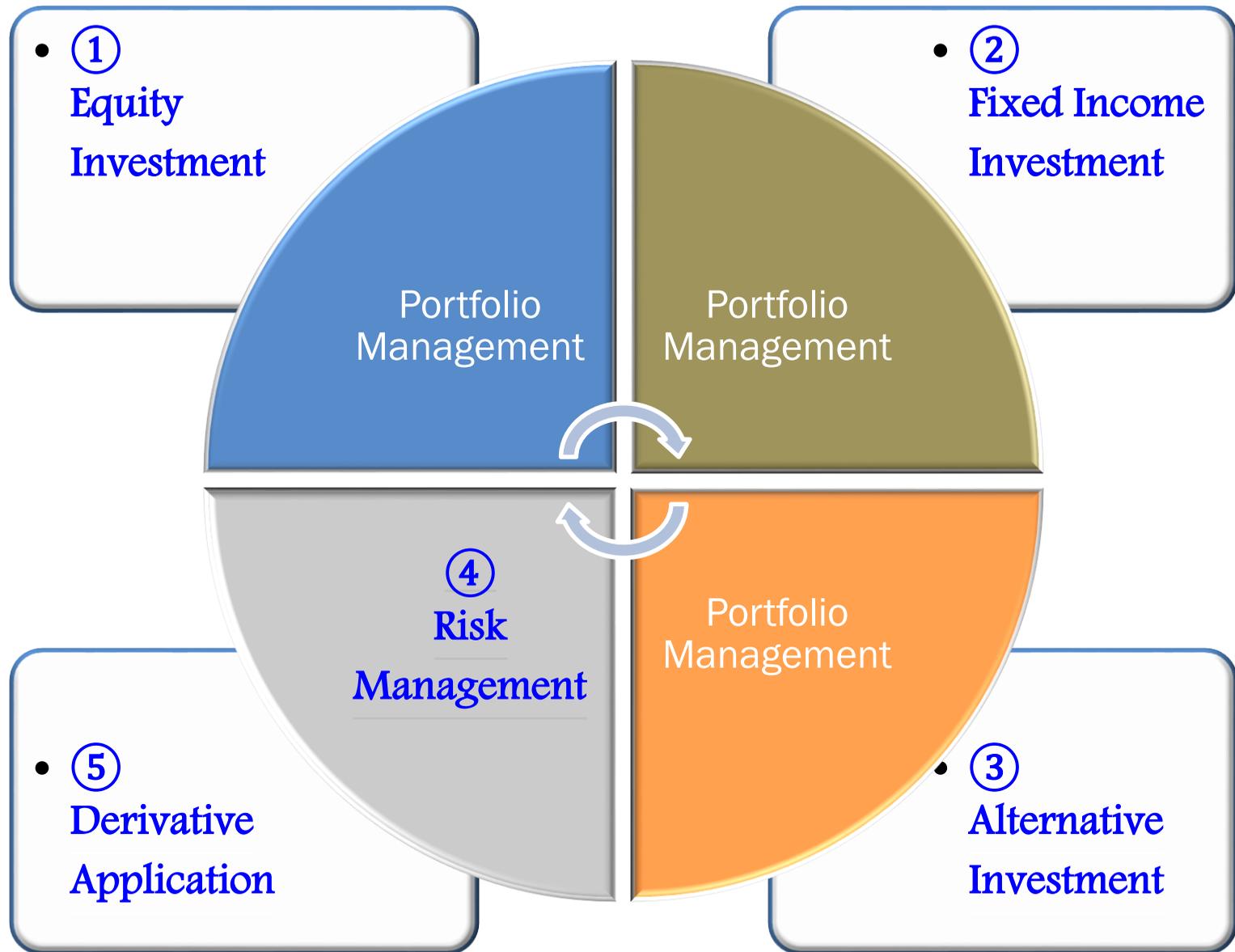
Monitoring & Rebalance

What to monitor & when to rebalance allocation?	%-of-portfolio rebalancing
Constance mix – rebalancing to the strategic asset allocation	Dynamic asset allocation strategies: <ol style="list-style-type: none">1. Buy & Hold (B&H)2. Constant mix (CM)3. CPPI (constant proportion portfolio)

Evaluation & Attribution

Performance measurement Risk-Adjusted methods	Benchmarks Identification
Performance attribution	Macro Performance Attribution
Performance appraisal	Micro Performance Attribution
TWRR vs. MWRR	Bond Performance Attribution

Asset Classes



Fixed income investment

What risk associated with fixed-income portfolio?	Return decomposition–relative–value methods
Managing funds against an index	Leveraged return calculation
Aligning risk exposures of portfolio & benchmark	Risk hedging using Bond futures.
How to select benchmark ?	Credit derivatives & spread products
Portfolio immunization	Credit default swaps
Rebalance bond portfolio	International bond investment

Equity portfolio management

Passive Equity investing	Equity style analysis: <ol style="list-style-type: none">1. Return-based2. Holding-based3. Other aspects
Create a passive exposure using derivatives	Long-short investing
Construct index portfolios	Core-Satellite Approach
Active equity investing	Selling disciplines of active investors
Semi-active equity investing	Managing a portfolio of managers

Alternative investment

Common Features	Hedge Funds: <ul style="list-style-type: none">• Structure• Benchmark & Performance analysis• Role in a portfolio
Real Estate: role in a portfolio construction	Managed futures
Private Equity and Venture Capital	Distressed Securities
Commodity Investment to portfolio formation	Commodity Derivatives

Risk Management

Risk management Process	Risk-adjusted Performance Evaluation
Source of Risk	Currency & Portfolio Risk
Market Risk Measurement	Active Currency trading Strategies
VAR Methods	Forward & FX swaps in currency hedge
Stress Testing	Cross, macro & Minimum-variance hedge
Credit Risk Measures	

Derivative application

Stock index futures	Interest rate options & spread
Currency forwards	Interest rate Swaps
Spread Trading using options: <ul style="list-style-type: none">• Butterfly• Straddles & Collars	Equity & Currency swaps and swaption
Delta hedging	

Ethical/ Professional Standards

Asset manager code	Fair dealing
Supervisory	Disclosure
Compliance	Research reports
Priority of transaction	Material non-public information

GIPS

1. Input data	5. Presentation & Reports
2. Calculation methodology	6. Real estate
3. Composite construction	7. Private equity
4. Disclosures	8. Wrap fee accounts
<ul style="list-style-type: none">• Item set → can test multiple concepts• Presentation → identify errors and omission• Statement → is statement correct? If not, what's wrong• Disclosures → focus on requirement & violations	