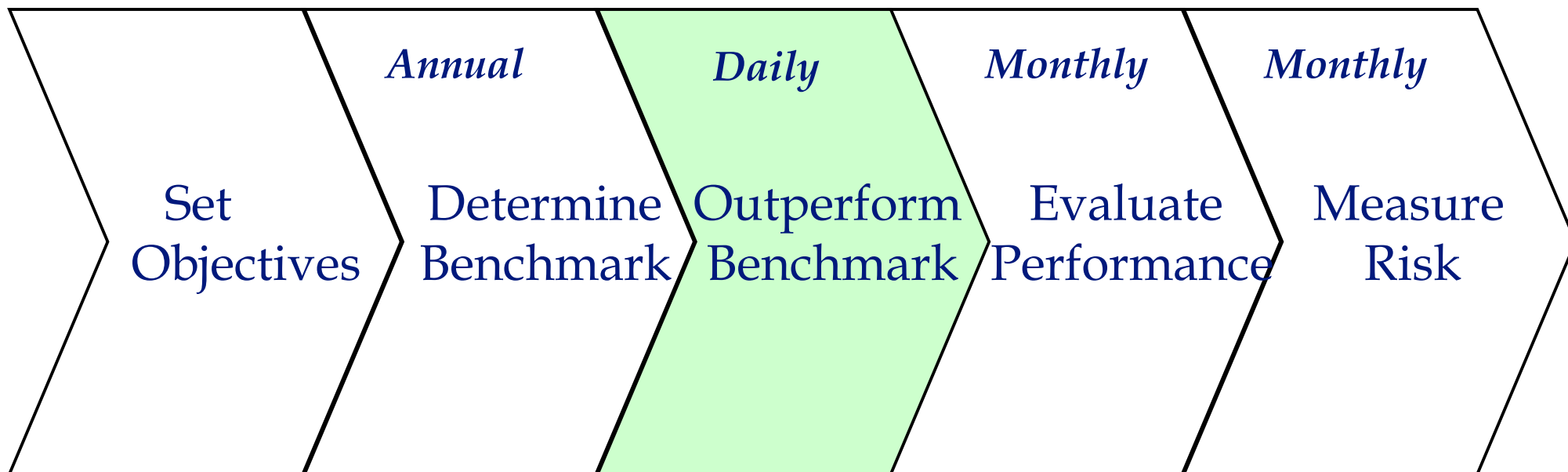




Engineering Your Own Alpha

Key to Success – Effective Decisions



- Traditional Approach – Alpha from External Managers
- New Approach – Add Alpha from Informed Decisions
- Governance/Oversight of Decisions - Transparency

Frequent Decisions Funds Make



1. Manage ongoing cash flows
2. Evaluate & implement rebalancing strategies
3. Manager allocations
4. Asset, country, style, or currency allocation

*Each can be a source of return or,
if badly managed, can reduce returns*

Decision Process and Framework

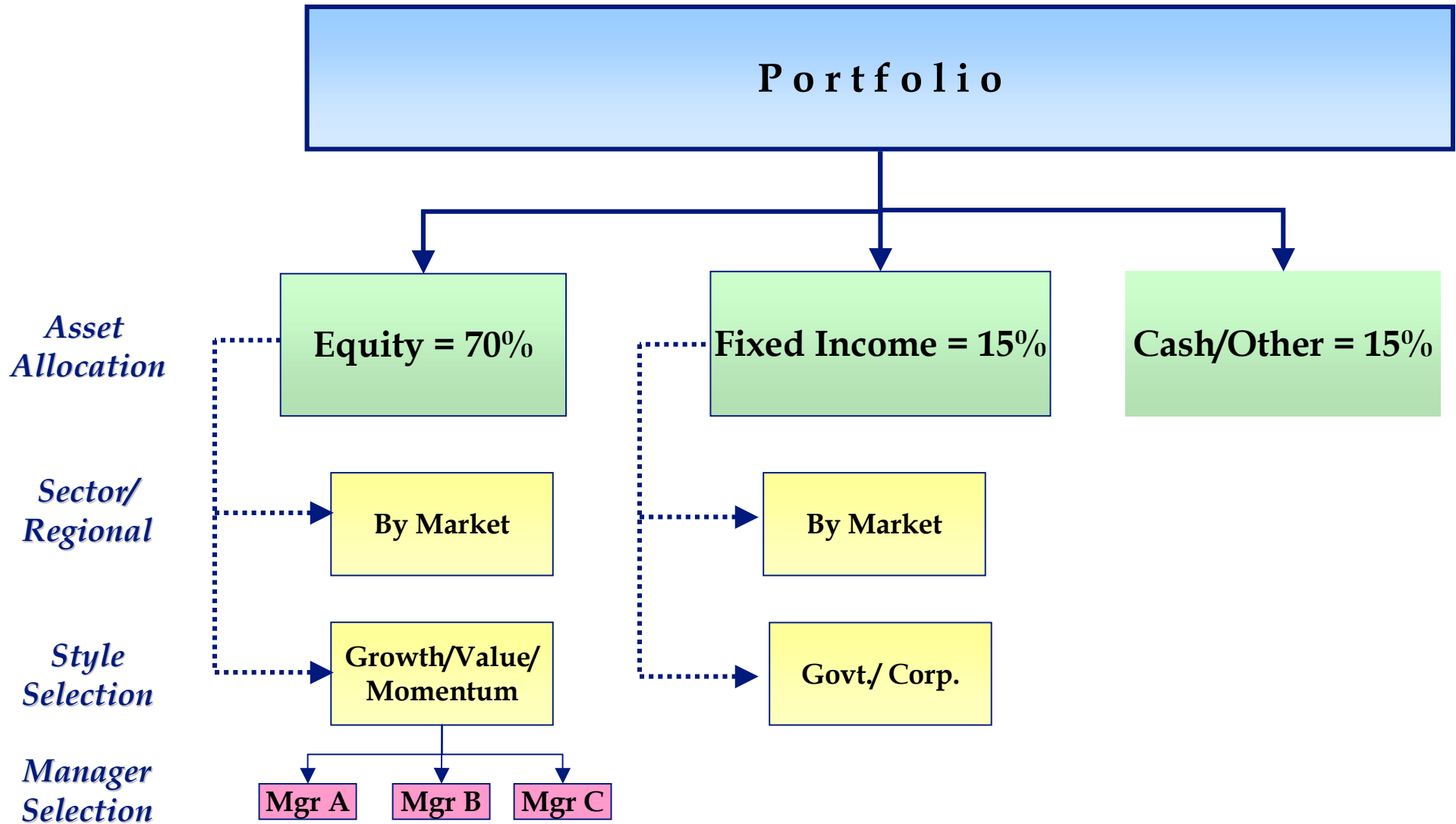


State-of-the-art framework for all decisions:

- Identify decisions/responsibility at every level
- Develop rules to guide each decision
- Set up consistent evaluation process for all decisions
- Evaluate portfolio impact of decisions on risk/return

*Manage risk by making all decisions explicit –
use research/market information*

Every Decision is a Source of Return



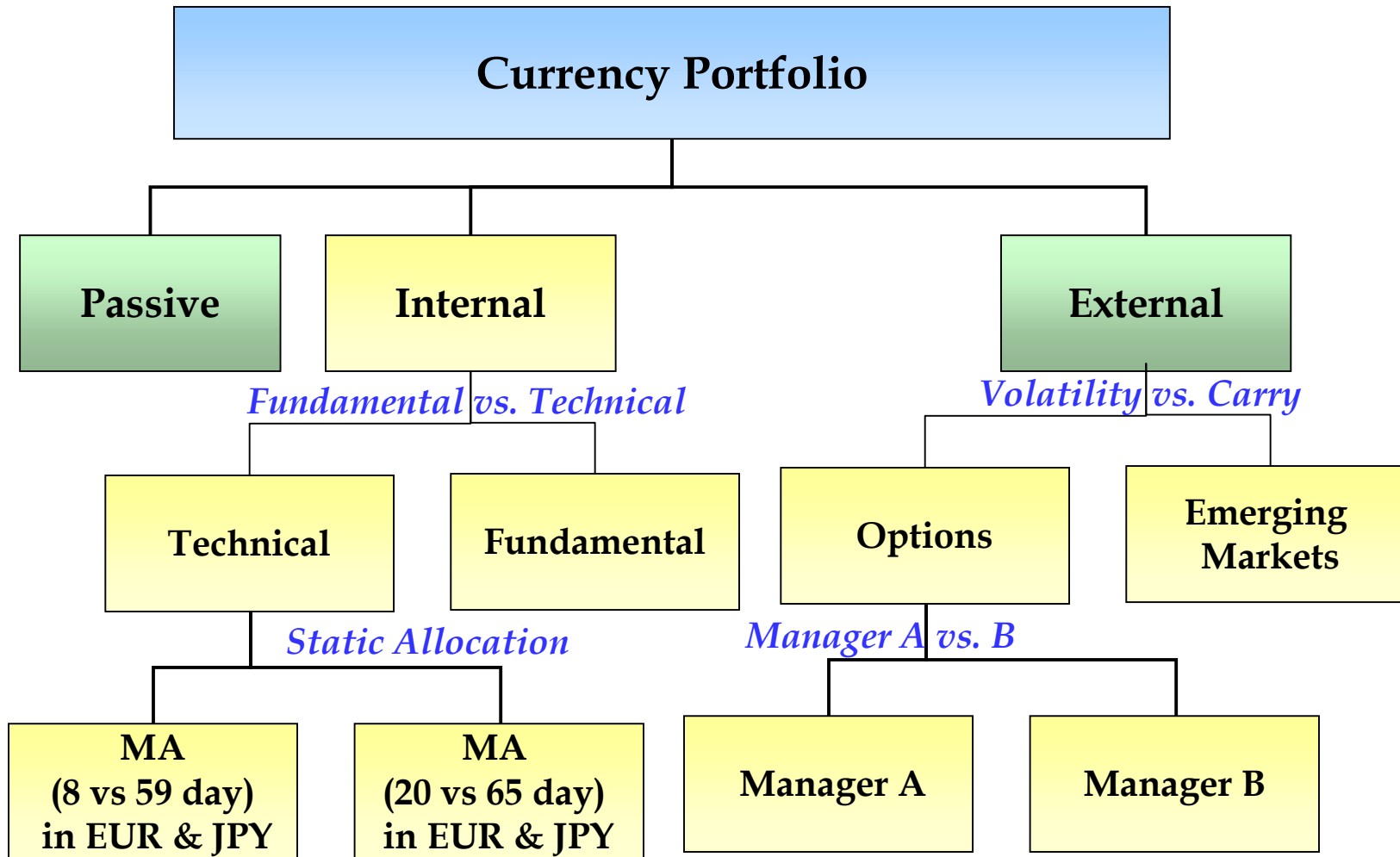
Three Simple Rules Make Money in FX



- Currency markets trend
 - Many combinations of moving averages
- Interest rates predict currency moves
 - Simple carry and yield curve rules
- Options: a source of negatively correlated alpha

Why pay active fees for simple rules?

European Currency Decision Process



alphaengine : Generate Alpha/Manage Risk



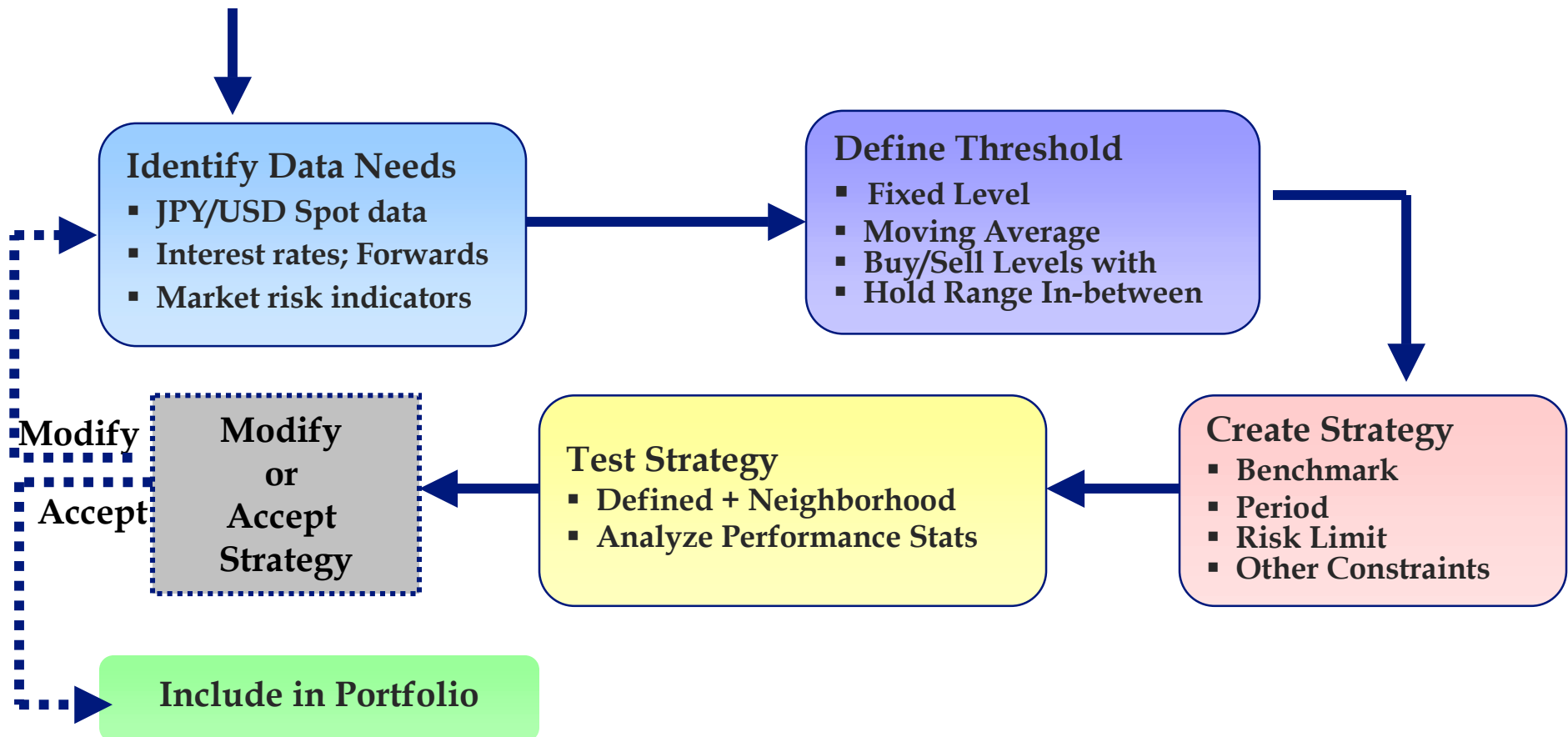
- Facilitates all decisions at all levels of the portfolio
- Easy-to-use: focus on generating investment ideas
(*not on modelling, data, calculations, technology*)
- Customize to clients' process and objectives
- Transparency facilitates oversight
- Quick – analyses take a few minutes!

Evaluates aggregate impact of all decisions in Portfolio

Process to Create Investment Rules



RULE/STRATEGY: *Buy JPY (vs. USD) when cheap; Sell when expensive*
Trading Condition: *Buy JPY when interest rates are high; Sell otherwise*

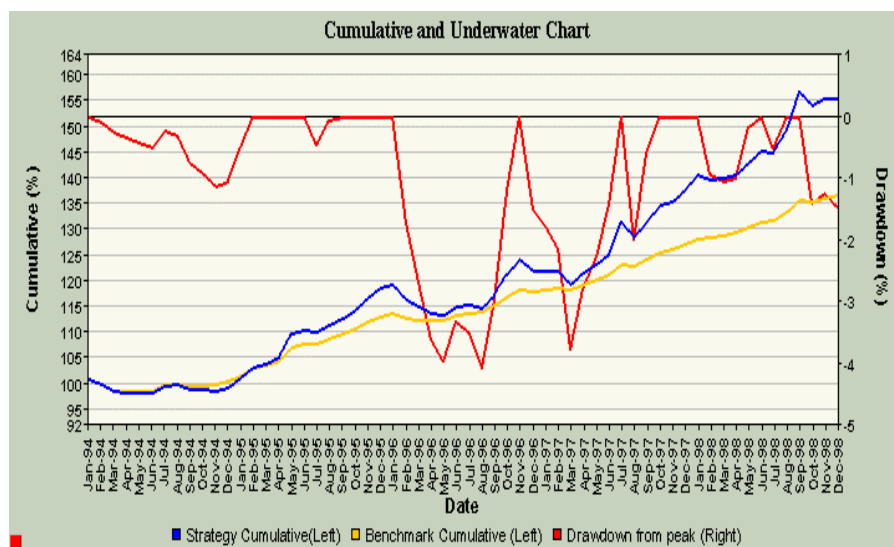
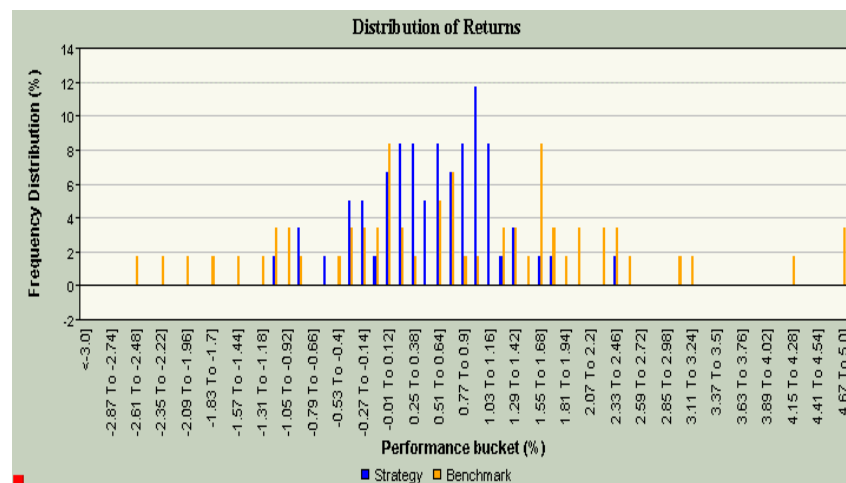


Use Detailed Metrics for All Decisions



Performance Measures

	Benchmark	Strategy	Excess
Return %	6.47	9.25	2.78
Cum. Return %	36.79	55.64	18.85
Risk %	2.28	5.58	3.55
Return / Risk Ratio	2.84	1.66	0.78

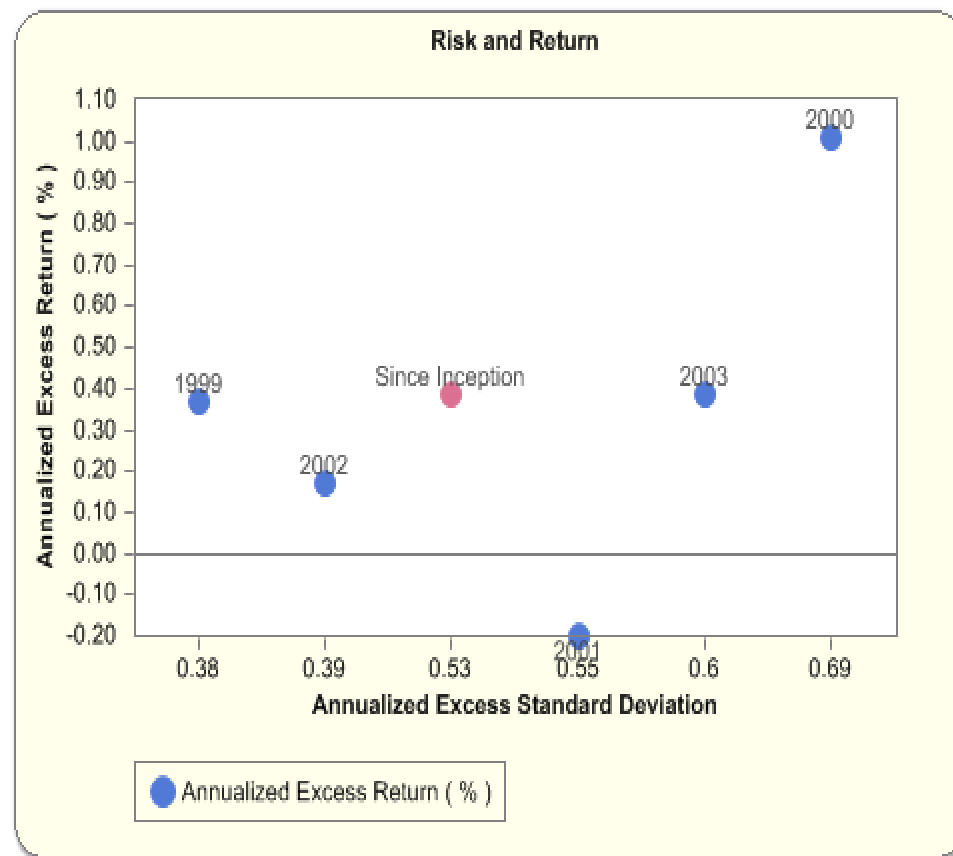


	Strategy	Excess
Success ratio of the rule %	70	56.67
Average returns when positive %	1.51	0.86
Average returns when negative %	-1.02	-0.60
Max. consecutive periods of positive returns	7	7
Max. consecutive periods of negative returns	4	5
Max. relative loss for a period %	-2.54	-1.99

Effective Analysis on Multiple Rules

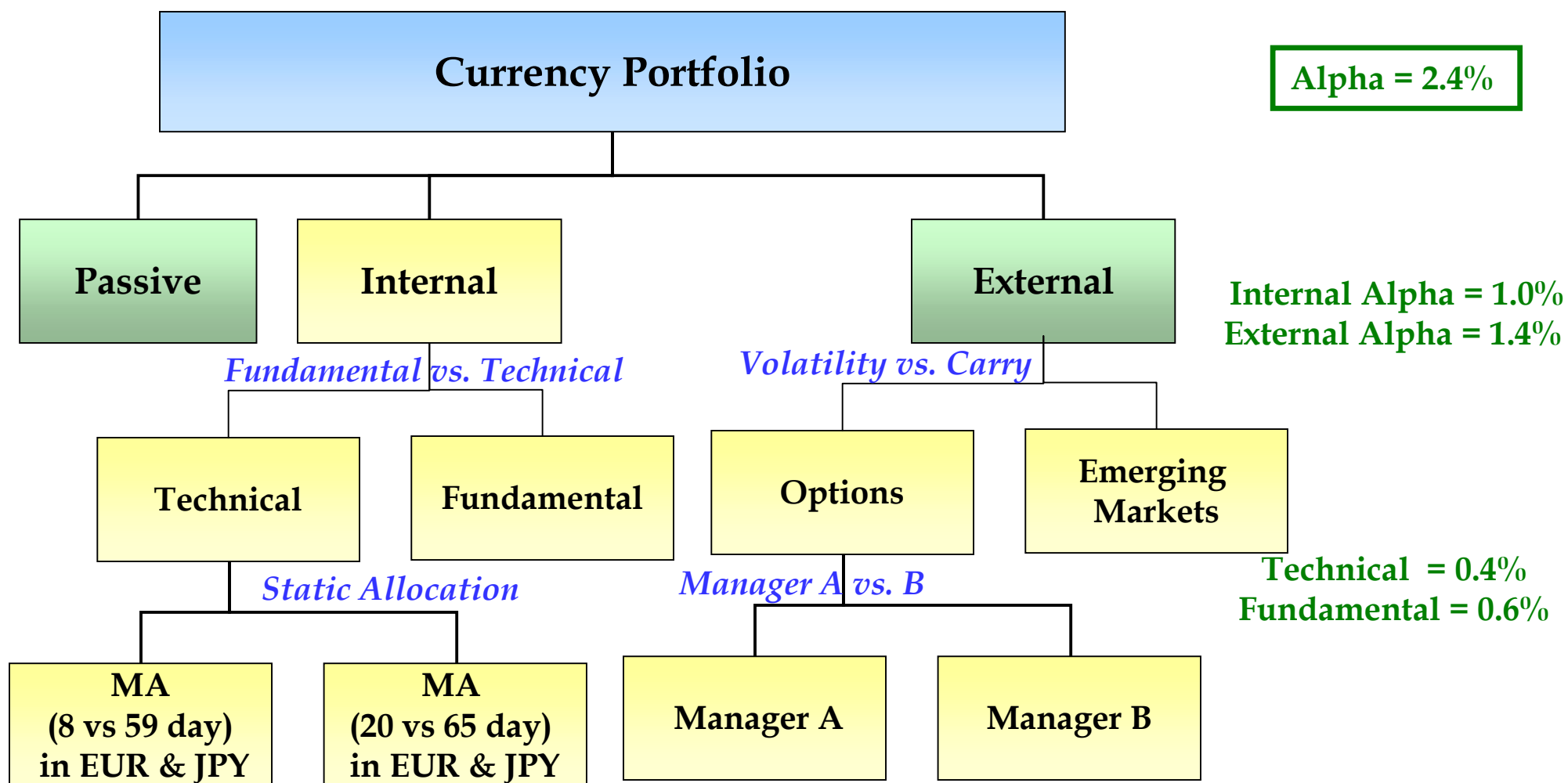


	Annualized Return	Annualized Std Deviation	Annualized Return-Risk Ratio
Strategy Excess	0.39%	0.53%	0.7319
JPY20-65day-Excess	0.26%	0.63%	0.4168
Eur MA 20/65 Excess	0.51%	0.87%	0.5839

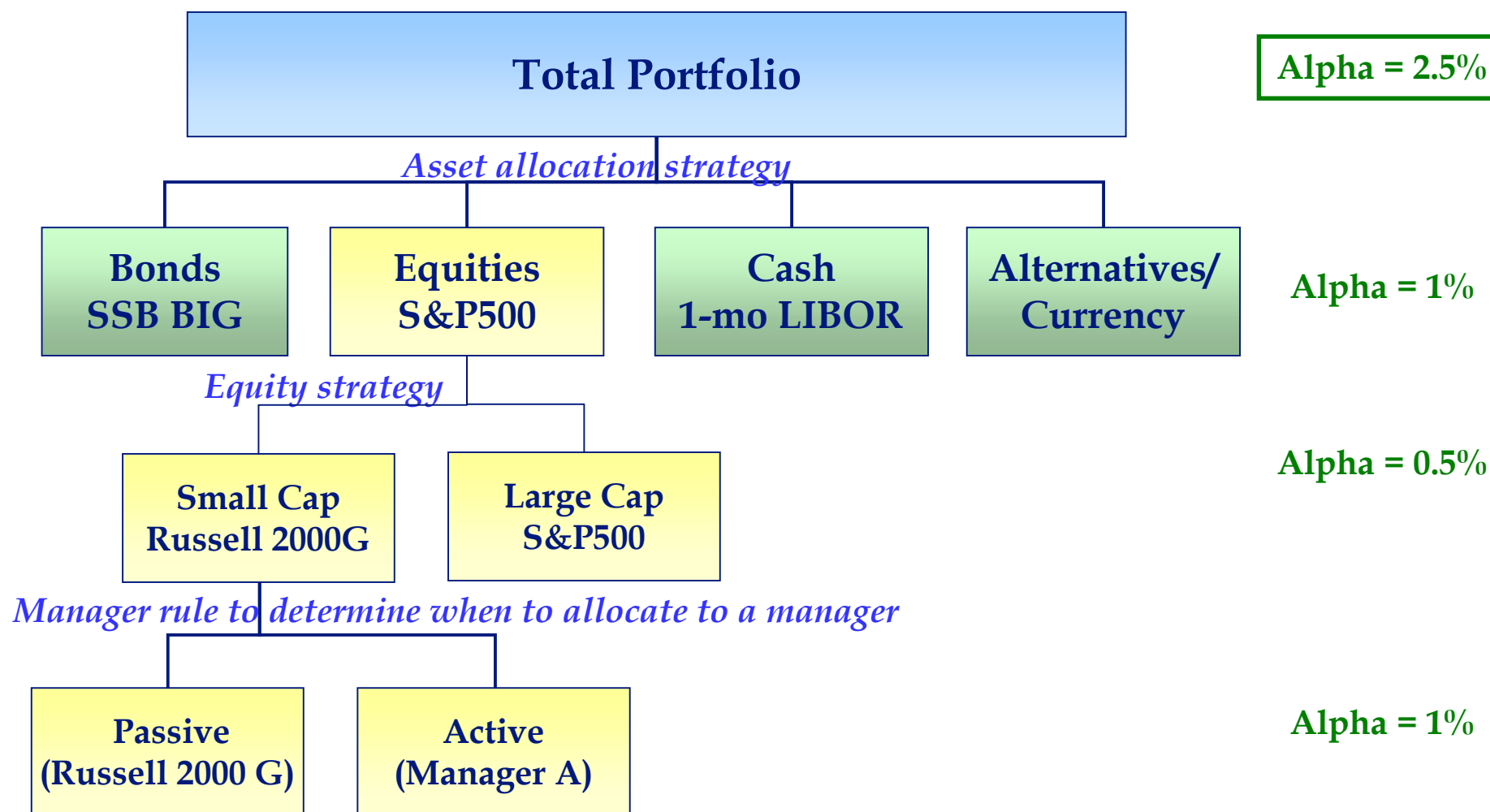


Evaluate these ideas in a few minutes!!

Key: Evaluate Aggregate Impact



Key: Evaluate Aggregate Impact



Summary



- Many (explicit and implicit) decisions in a portfolio
- Each is an opportunity for alpha/risk management
- FX market is ideal for opportunistic decisions
- Can make effective external and internal decisions
- Easy to implement with existing staff and resources
- Can adopt best practices quickly and easily

Appendix

FX Rules to Improve Performance



- *Moving Average Rules- Favor currencies if the short MA is higher than the long MA (8/59; 20/65; 24/115; 5/130)*
- *Buy the Carry- Favor the currency with the highest interest rates.*
- *Conditioned Carry – Add triggers based on size of differential or volatility*
- *Yield Curve Slope – Sell currencies with the steep yield curve*

Other Rules to Improve Performance



- *“Beating the Dow” - Favor stocks over bonds when earnings yield is greater than yield of bonds*
- *“Beating the Dow-2” - Favor bonds (over cash) if price of gold is higher than a year ago*
- *Momentum – Favor stocks when today’s price is greater than 200 day moving average*
- *Seasonality – Stocks underperform between May and September*

Informed Rules to Improve Performance



- “Large vs. Small” - *Favor large over small caps when volatility of the S&P500 rises*
- “Large vs. Small – January Effect” - *Favor small caps in January*
- “Currency Performance – Yield Curve” - *Favor currencies with a flat yield curve*
- “Momentum – Manager” - *Small growth managers do better when index is underperforming*

Reasons Clients Want the System



- To Manage Cash and Generate Additional Returns
- Formalization of Process Allows Better Oversight
- Client is Empowered – More Likely to Innovate
- Improves Rebalancing/Trading Impact (Less Lags)
- Eliminates Possibility of Costly Errors
- Can Easily Track a Library of Strategies
- Efficiency and Cost Savings in Research Efforts