NPTEL

Course Name: Security Analysis and Portfolio Management

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Session 29: Equity Portfolio Management Strategies

1. What are the different types of Equity Portfolio Management Strategies?

Ans.

I. Passive Strategy: Strategy of holding a portfolio of securities without attempting to outperform other investors through superior market forecasting

- Long-term buy-and-hold strategy
- Usually track an index over time
- Designed to match market performance
- Manager is judged on how well they track the target index
- Replicate the performance of an index
- May slightly underperform the target index due to fees and commissions
- Many different market indexes are used for tracking portfolios

II. Active Strategy: Attempts to outperform a passive benchmark portfolio on a risk-adjusted basis

- Attempts to outperform a passive benchmark portfolio on a risk-adjusted basis
- Goal is to earn a portfolio return that exceeds the return of a passive benchmark portfolio, net of transaction costs, on a risk-adjusted basis
- Practical difficulties of active manager
- Transactions costs must be offset
- Risk can exceed passive benchmark
- Screening can be based on various stock characteristics: Value, Growth, P/E, Capitalization

2. Write short note on Quadratic Optimization.

Quadratic Optimization:

- Rather than obtaining a sample based on industry or security characteristics, quadratic optimization or programming techniques can be used to construct a passive portfolio.
- With quadratic programming, historical information on price changes and correlations between securities are input to a computer program that determines the composition of a portfolio that will minimize tracking error with the benchmark.

- Advantages: Historical Information on price changes and correlation between securities are input into a computer that determines the composition of a portfolio that will minimize tracking error with the benchmark.
- Disadvantages: Based on historical data which will lead to failure to track the index

3. What are the suggestive ways towards Passive Equity Portfolio Management?

Ans:

Passive Equity Portfolio Management: Strategy of holding a portfolio of securities without attempting to outperform other investors through superior market forecasting

- Long-term buy-and-hold strategy and uusually track an index over time
- Designed to match market performance
- Manager is judged on how well they track the target index and able to rreplicate the performance of an index
- May slightly underperform the target index due to fees and commissions
- Many different market indexes are used for tracking portfolios

Types of Passive Portfolios:

- Index Funds: It attempts to design a portfolio to replicate the performance of a specific index i.e. benchmark index. The difference arises between benchmark index and portfolio because of cash flow, company mergers and bankruptcies

- Customized Funds: In this case the benchmark index is a customized rather than a published index. This has been made because of two reasons i.e. constraints on allowable securities and to provide adequate diversification

- Factor/Style Funds: This type of fund replicates a benchmark geared to mimic the performance of a given stock factor such as growth, small capitalization or high yield. It can also be specialized or titled towards specific sector or industries such as the energy sector.

4. What are the different Index Portfolio Strategy Construction Techniques?

Index Portfolio Strategy Construction Techniques:

I. Full Replication or Full Sampling: All securities in the index are purchased in proportion to their weights in the index.
    - Advantages: All the securities in the index are purchased in proportion to their weights in the index, It helps to ensure close tracking
    - Disadvantages: More transaction cost, High commission for reinvestment in dividend

II. Sampling: Only a representative sample of the stocks that make up the index are purchased.

- Advantages: Buys a representative sample of stocks in the benchmark index according to their weights in the index, Lower commission, Reinvestment of dividends is less difficult
- Disadvantages: More tracking error

III. Quadratic Optimization or Programming

- Advantages: Historical Information on price changes and correlation between securities are input into a computer that determines the composition of a portfolio that will minimize tracking error with the benchmark.
- Disadvantages: Based on historical data which will lead to failure to track the index

Choosing the Right Index Involves following considerations:

- Small market indexes are liquid but under diversified
- Larger market indexes are illiquid but diversified
- So the benchmark index should be the right mix of both
- Good Index characters are: Representative of market, Well diversified,Highly liquid, Professionally managed