

Introduction to Methods and Vehicles for Investing Passively



Architects of Financial Prosperity

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What is Active Investing?

- Active investing attempts to beat index through skill
- Higher costs, transaction fees and turnover than passive investments
- Because of concentration, active management can have higher risk (depending upon how we measure risk)
- Prone to behavioral mistakes
- Exposes one to risk that they may underperform index, or “tracking error” risk
- Average active manager underperforms index

What is Passive Investing?

- Passive investing attempts to exactly replicate an index
- It has lower costs, lower transaction fees and lower turnover than active investing
- Assures investor of “average” performance...
- ... but over longer periods, outperforms the average active manager

Vehicles for Passive Investing

1) Exchange Traded Funds

2) Mutual Funds

3) Separate Accounts

Exchange Traded Funds (ETF's)

- Trade as stocks on Exchanges (e.g. S&P 500 trades as SPY and IVV)
- Because of size (large) can exactly replicate index
- Very democratic in that small investors are treated same as large investors

Low tracking error, low fees (as low as 10 b.p.), high liquidity, decent control over gains/losses and excellent dividend management.

Mutual Fund

- Similar to ETF's, however, as commingled fund slightly less control over gains/losses
- No client-specific customization
- Depending on size, can exactly replicate index
- No trading cost (ETF's must pay trading commission)

Low tracking error, low fees (as low as 5-10 b.p. for institutional), and excellent dividend management.

Separate Account

- Complete customization with regard to socially responsible investing or transactions/gains
- Large account and fee minimums
- As account get smaller tracking error increases

High account minimum (>\$50mn), high minimum fee, tracking error determined by account size, complete control over transactions.

Separate Account – Loss Harvesting

- Many shares held, but only those that have declined in value are sold, realizing losses
- Often used in core/satellite scenario, where gains realized in active accounts are offset by losses in passive account
- Enough securities are held so tracking error is low (not zero, but low)
- Clear benefits in the control of gains realized

Strategies for Managing Passive Portfolio

1) Full Replication

2) Stratified Sampling

3) Quadratic Optimization or Programming

Full Replication

- Buys all the companies represented in an index (e.g. S&P 500, purchase all 500 companies)
- With more companies, higher transaction costs and greater complexity in reinvestment of dividends
- Lowest tracking error of all methods

Higher costs, but more exact index replication

Stratified Sampling

- Buys representative basket of the higher weight stocks in an index (not all of them)
- Some indexes may have a high number of companies or contain illiquid companies making it impractical for “Full Replication” (e.g. Russell 3000, bond indices, international indices)
- Sampling lowers transaction costs (fewer companies) but increases tracking error (not perfect match)

Less exact index replication, but lower costs.

Quadratic Optimization or Programming

- Historical price change and correlations entered into computer to determine optimum portfolio with regard to tracking error and costs
- Problem is “non-stationarity”, or will the statistical properties remain constant over time

Less potential certainty of index replication.

Enhanced Strategies

1) Synthetic

2) Stock Based

a) Quantitative

b) Fundamental

Synthetic

- Uses derivatives to gain exposure to equity market
- Small cash position (5%) is required for margin on derivatives
- Remaining cash is invested in fixed income market
- Paradoxically, out- or under-performance is dependent upon successful fixed income management

Stock Based

Stock based processes slightly overweight securities, industries or sectors that they expect to outperform and underweight those that they believe will underperform.

- **Quantitative** strategies rely on computer models to rank relative attractiveness of securities
- **Fundamental** strategies use the subjective judgment of analysts to determine stock weights

Enhanced Strategies

- Usually run tracking errors of below 1
- Typically tied to the S&P 500
- The record for these products is similar to that of traditional active management

Questions for Investors to ask Themselves

- To which index/market does one want exposure?
- Is the account to be used in core/satellite scenario?
- Is loss harvesting desired?
- What is one's tolerance for tracking error?
- Transaction or gain sensitivity?
- Fees?
- Social restrictions?
- Investment time horizon?
- Degree of advice/guidance sought by investor?

