

Best practice

- ✓ Diversification
 - Allocating capital among multiple asset classes and securities
 - Reduces non-systematic risk
- ✓ Rule of 100
 - Determines appropriate asset allocation based only on age
 - 100 minus age = % in stock
- ✓ Strategic asset allocation
 - Long-term asset allocation goal
 - Rebalance portfolio periodically
- ✓ Tactical asset allocation
 - Deviating away from long-term goal for short-term opportunity
- ✓ Passive management
 - Investing in a pre-determined large portfolio ("the market")
 - Lower expenses than active management
- ✓ Active management
 - Investing in chosen securities within a large portfolio
 - Higher expenses than passive management

Portfolio analysis — calculation

- ✓ Total return
 - Measures overall rate of return on a security or portfolio
- ✓ Total return formula
 - $\text{Total return} = \frac{\text{All gains and/or losses}}{\text{Original cost}}$
- ✓ After-tax return
 - Total return with taxes factored out
- ✓ Capital asset pricing model (CAPM)
 - Financial model for determining the expected return
 - Only considers systematic risk
- ✓ Expected return calculation
 - $\text{ER} = \text{RF} + (\text{Beta} \times (\text{MR} - \text{RF}))$

Portfolio analysis — markets

- ✓ S&P 500 index
 - Tracks 500 large-cap stocks
 - Cap-weighted index
- ✓ S&P 100
 - Tracks 100 large-cap stocks (a subset of the S&P 500)
 - Cap-weighted index
- ✓ S&P 400
 - Tracks 400 mid-cap stocks
 - Cap-weighted index
- ✓ Dow Jones Composite
 - Tracks 65 prominent stocks
 - Composite of DJIA, DJTA, and DJUA
 - Price-weighted index
- ✓ Dow Jones Industrial Average (DJIA)
 - Tracks 30 prominent stocks (various industries)
 - Price-weighted index
- ✓ Dow Jones Transportation Average (DJTA)
 - Tracks 20 prominent transportation stocks
 - Price-weighted index
- ✓ Dow Jones Utilities Average (DJUA)
 - Tracks 15 prominent utilities stocks
 - Price-weighted index
- ✓ Russell 2000
 - Tracks 2,000 small-cap stocks
 - Cap-weighted index
- ✓ NASDAQ Composite
 - Tracks all stocks on the NASDAQ exchange
 - Cap-weighted index
- ✓ NASDAQ 100
 - Tracks 100 largest non-financial stocks on the NASDAQ exchange
 - Cap-weighted index
- ✓ Wilshire 5000
 - Tracks all actively traded stocks in the U.S.
 - Considered the broadest index
 - Cap-weighted index
- ✓ EAFE index
 - Tracks stocks in Europe, Australasia, and Far East
 - Cap-weighted index

Portfolio analysis — Modern portfolio theory

- ✓ Modern protocols and best practices related to investing
- ✓ Goal: to attain the highest return potential with the smallest risk exposure
- ✓ Overall risk/return profile of the portfolio is the most important
- ✓ Risk/return profile of individual securities not significant
- ✓ Diversification necessary to reduce risk
- ✓ Add negatively correlated securities to the portfolio to diversify