Size → Over a period of time small cap stocks generate more profit as compared to (

Value Effect → low B/M means stock is expensive } Inexpensive outperfo
high B/M means stock is inexpensive

B/M → Book to market ratio

Momentum effect → stocks performed well last year tend to perform better

Profitability effect → Profitable stocks outperform unprofitable stocks

Risk effect → low risk stocks outperforms high risk stocks

aka Volatility effect

Factor for stock returns

Beta Size Value momentum Quality Risk Quality.

$$r_t^{trend} - r_t^f = \alpha + \beta_1 (r_t^m - r_t^f) + \beta_2 SMB_t + \beta_3 HML_t + \beta_4 MOM_t + \beta_5 BAB_t + \beta_6 QM_t$$

Abnormal Return = Actual Return − Expected Return

Sharpe Ratio = $\frac{(R - R^f)}{\sigma(R - R^f)}$ → Excess of portfolio's return above risk free rate
→ Standard deviation of excess return

↑ Sharpe Ratio indicate ↑ reward per unit risk

Treynor Ratio = $\frac{(R - R^f)}{Beta}$ ⇔ ↑ Treynor Ratio indicate ↑ reward per

Jensons α = $r_{i,t} - r_f = \alpha_i + \beta_i (R_{m,t} - r_f) + \varepsilon_{i,t}$

$r_{i,t}$ is return on asset i at time t r_f is risk free rat

$R_{m,t}$ is return on the market index at time t

α_i an β_i need to be estimated for M regression.

β less than 1 indicates less risk than average

Low fee fund yields better results.

Main component of Investing fees:

1) Commissions 2) Bid-ask cost = diff (Price Quoted, purchase p

3) Delay

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