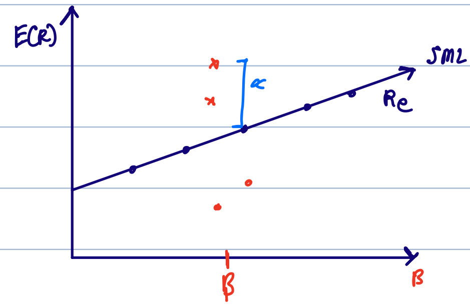

x → under
• → over

Difference b/w E(R) and Re is ALPHA

CONDITIONAL MODEL

$$R_{HF} = \alpha_i + \beta_1 F_1 + \beta_2 F_2 \ldots \beta_K F_K + D_t \beta_1 F_1 + \ldots D_t \beta_K F_K + \varepsilon_i$$

α_i → Intercept.

D_t → Dummy variable: 0 → NORMAL market; 1 → Stressed Market

β towards multiple factors will be different for different types of hedge funds.

Major Problem can be: Multi collinearity.

(*) problem c̄ Sharpe Ratio → goes down even for +ve deviation.

we only penalize manager for -ve ".

∴ use Sortino → uses only downside deviation

vc for hedge funds.

STRATEGIES

- Equity Related
  - long/short ①
  - dedicated short bias ②
  - Equity market neutral ③
- Event Driven
  - M/A ④
  - Distressed securities ⑤
- Relative Value
  - fixed income arbitrage ⑥
  - convertible bond arbitrage ⑦
- Multi manager.
  - multi strat ⑫
  - F.O.F. ⑬
- Opportunistic
  - global macros ⑧
  - managed futures. ⑨
- Specialist.
  - volatility ⑩
  - Reinsurance ⑪

① Long/Short :

→ s^+ → under valued

→ s^- → over valued.

→ portfolio Beta = weighted sum of +ve, and -ve betas of various long/short positions.

→ 40% to 60% net long exposure. ∵ general trend is upwards.

→ returns comparable to those of a long-only fund. c̄ lower σ

role is to derive alpha.

② Dedicated Short Bias.

- S^- → overpriced
- activist short seller : → provides research
- lower expectations.
- higher volatility.
- Bottom-Up approach → for stock selection.
- relatively little leverage used..
- 0 or -ve correlation → diversification benefit → but exp. returns ↓

③ EQUITY MARKET NEUTRAL → discretionary → intuition
→ Quant → set of rules

- Near 0 overall exposure.
- weighted Betas = 0.
- Temporarily mispriced securities → Alpha.

Goal
- relatively immune to movements in markets
- modest returns
- Diversification ↑↑↑.

SUBTYPES
- Pair Trading → 2 similar stocks → over/under valued → divergence is exploited.
- Stub Trading → Long/short of subsidiary /parent → % of subsidiary owned by parent.
- Multi-class trading → long/short on different classes of shares → Tata motors DVR, → Tata motors normal.

④ Soft-Catalyst Event Driven → Investment made before event announced → More VOLATILE
Hard- " " " → " " after " " → LESS "
possibility of anticipated outcome → EVENT RISK

④ M/A → Insurance on Merger activities.
↳ If success → Hedge funds get premium.
↳ Higher Sharpe Ratios.

⑤ DISTRESSED SECURITIES // Capital Structure Arbitrage.
↳ Restructuring.
↳ high lock-up periods.
↳ low leverage.
↳ moderately high levels of illiquidity due to nature of assets being purchased.

RELATIVE VALUE : → exploit valuation differences // hybrid debt // fixed Income securities.

⑥ • Fixed Income Arbitrage : → S^+ .... under
→ S^- ... over
→ leverage
→ Yield curve trades : • macroeconomic forecasts → anticipated Yield curve.
→ Carry Trade : → shorts low yielding , long- high-yielding security

→ earn return from spread narrowing
+ +ve carry

→ high leverage → volatility → domino effect of margin calls.

(7) Convertible Bond Arbitrage : • regular coupon payments ⇄ common-stock shares.

- From Implied Volatility
- liquidity
- volatility modest.

↓ Best during normal market conditions.

$3B^{+} + 2S^{-}$

→ short equity exposure stems from delta hedging

(8) Opportunistic Hedge Fund Strategies.

- → T.A.
- → F.A.
- → Systematic
- → Discretionary.

(9) Global Macro strategies. → Identify a global trend early.

→ TOP DOWN ANALYSIS

(10) Managed Futures → desired derivatives positions.

→ crowding effect.

- TSM (momentum)
- CSM (momentum + asset class)

(11) SPECIALIST

Volatility

- trading VIX
- Option strategies
- OTC
- Futures → mean reversal → crowd into VIX futures (Limitations)
- Volatility SWAPs / Variance SWAPs.

Reinsurance → • uncorrelated • diversification

→ sells insurance → Hedge fund $\xrightarrow{\text{Premium}}$ I

Price > SURRENDER VALUE

" " ← Benefit I