Chapter 23. 有限套利.

前提是所有人的选择都是理性的.

Competition → Rational → efficient market.

Irrational (Behavior Finance).

- Irrational investor (Noise Traders).
- Limits of Arbitrage.

Fundamental Risks 基本面风险.

- 某些企业的估值10元. 但现在是9元. 买入后可能面临国家政策等影响. 买入后会下跌. 没法套利.
  好的本、没是做空另外一个.

Implementation Costs 实施成本.

- 比如交易佣金. 买卖价差. 冲击成本等.

Noise Traders risk 噪声交易者风险. ⊗

Shleifer Vishny 1997. 无套利

$t=0, 1, 2$

Asset Supply = 1.

Payoff = V(time 3) 0 (time 1,2).

有两类投资者: $r=0$

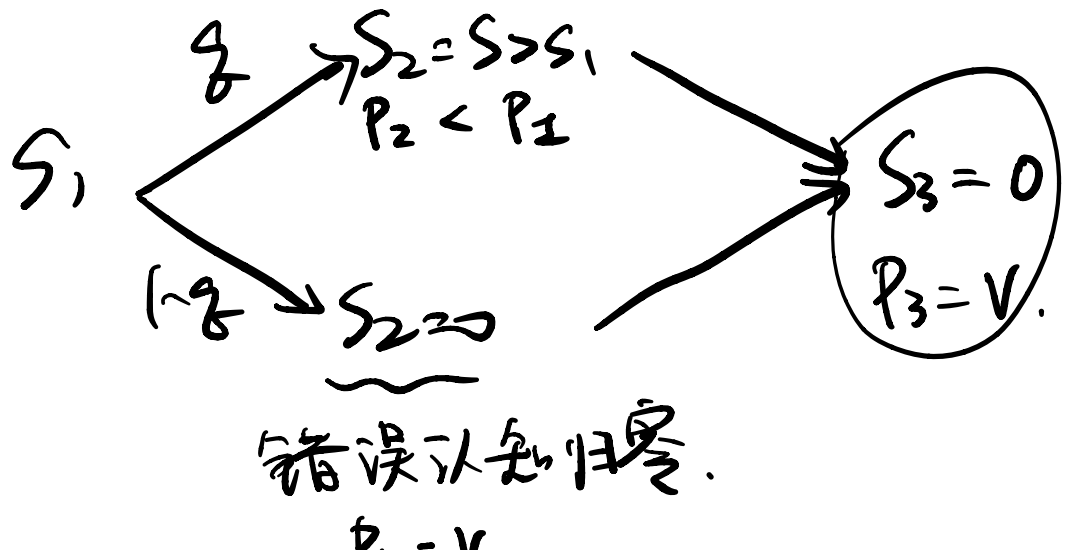
① Arbitrageurs. (理性的). (risk neutral).

② Noise Traders.
$V-S_t$ $(S_t>0)$. $t=1,2$.
⇒ 认知偏差. S_t: 噪声认知.

(ad hoc Assumption).

随意性假设

Demand $N(t) = \frac{V-S_t}{P_t}$ $t=1,2$. (认知价格/现有价格).



q的概率，认知错误变严重；$1-q$的概率，认知错误被消除.

Time 2: If $S_2=0$. $P_2=V$. 这时买入不亏也不赚.

If $S_2=S>S_1$: 价格偏差最严重，获利最多.

$A(2)=F_2/P_2$.

$\frac{V-S_2}{P_2}+\frac{F_2}{P_2}=1 \Rightarrow$. $P_2=V-S_2+F_2$. 假设$F_2<S_2$.

.套利者在2时刻资金有限.

Performance Based Arbitrage. PBA.

$F_2=F_1(1+a(R-1))$.

$R=(D_1\frac{P_2}{P_1}+F_1-D_1)/F_1$. (投资回报率).

$\Rightarrow F_2=F_1+aD_1(\frac{P_2}{P_1}-1)$.

$S_2=0$: $F_1+aD_1(\frac{V}{P_1}-1)$ 二时到期资金量.

$S_2=S$: $\left[F_1+aD_1(\frac{P_2}{P_1}-1)\right]\frac{V}{P_2}$. 二时到期资金量(含增值).