WEEK #2

LESSON #5:

Limited Liability
- divide an enterprise into shares, and no shareholder is liable for more than he/she put in
- investor psychology favours limited liability
* lottery effect.

Inflation Indexed Debt
"debt in terms of a consumer price index"
rice bond - debt payable in rice
but, the price of rice may have fluctuations ⇒ index of prices
*debt is measured relative to this index

"Consumer price index"

"money" - 3 functions:
* store of value
* unit of account
* medium of transaction

Unidad de Fomento (UF)
- allowed it to be tied to the Consumer Price Index.
valoruf.cl
- separate unit of account (unit of measurement)

Real Estate Risk Mgmt Devices
* Prof. thinks you should be allowed to short in real estate mkt ?!
CME - F&O for family homes.
• risk of human capital.
• livelihood insurance

LESSON #6: FORECASTING

random walk theory: process that each change is independent of other changes & is completely unforecastable.

Random Walk: $x_t = x_{t-1} + \varepsilon_t$
* first order auto-regressive model (AR-1) ⇒ random walk reverting back to a mean.

Intuition of Efficiency:

Markets are the best estimate of fundamental value; they drive biz's & help make decision.

"Security prices accurately reflect available info, & respond to new info as soon as it becomes available."

3 forms of Mkt Efficiency:
1. Weak form. prices incorp. info abt past prices
2. Semi-strong publicly avl info.
3. Strong all info incl inside info is incorporated

Price as PDV

the price of a stock must be the present discounted value of expected dividends."

Acc. Gordon Model,

$$\text{price} = \frac{\text{Earnings}}{r-g}$$

r = discount rate

g = growth of earnings

$$\frac{P}{E} = \frac{1}{r-g}$$

Gordon model ⇒ all companies must have same P/E unless the risk is diff.

high P/E → low risk, or high growth rate.

psychological causes, diff. in acc. stds, etc can cause diff P/E ~~ratios in~~ diff sectors

DOUBTING EFFICIENCY

A lot of human emotions are also involved in deciding what is bought/sold; maybe the efficient market's hypothesis is to be rejected.

- "efficient markets half truth"

Mkts tend to fall before a recession

↳ efficient mkt hypothesis: the mkt is responding to info.

↳ it causes recessions

BEHAVIORAL FINANCE

"the free market is the invisible hand that directs economy."
(Adam Smith).

desire for praise → praiseworthiness (as one grows old)

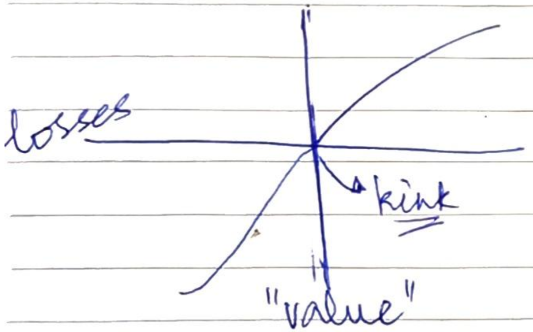
Prospect Theory

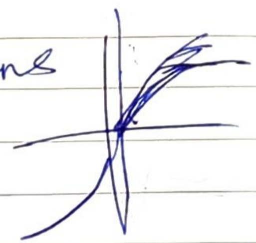
Core theory of economics is the "expected utility theory"

everyone has a utility fn which depends on the things they consume & it represents their happiness "loss aversion"

indifference curves - contours of the utility fn.
people in a world w/ no uncertainty would choose how much to buy @ S.P. to max. their utility fn.
In the real world, people will use various probabilities to calculate their expected utility & the maximized expected utility

Kahneman & Tversky, 1979.
utility fn → value fn
probabilities → subjective probabilities

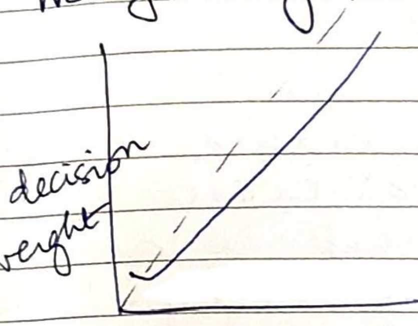




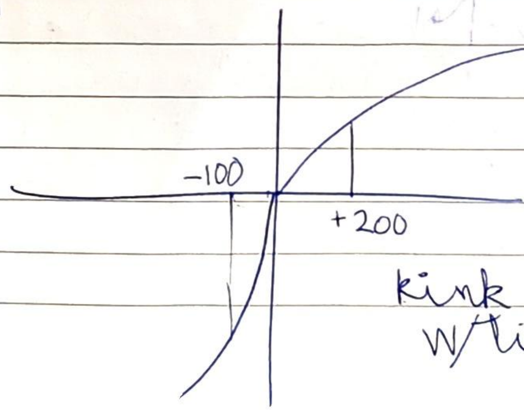
origin - reference point; your utility is dependent on the losses & gains you see possible from the ref. pt.

the origin moves w/ time
* shows a risk preference for losses

Weighting Function



people do not tend to take full acc. of differences in probability
- people get overly concerned with little profits & gains.
- people will try to gamble off their losses



kink moves w/time

$\frac{20}{100} \cdot 1000$

* Wishful thinking bias: people overestimate the probability of something they want to happen.
- accounts for volume in markets.

Cognitive Dissonance - mental ~~state~~ conflict that occurs when one learns one's beliefs are wrong.
* Mental Components - risky & non-risky portfolios.
* Attention Anomalies - no $10 bill lying around, someone else would've already picked it up.
* Anchoring - stock prices are anchored to their prev value.
* Representativeness Heuristic: people tend to choose best fit over the statistically probable.
* Disjunction Effect - inability to make decisions in anticipation of future info.

* Magical thinking - thinking something you do causes some action when it actually does not

Quasi Magical Thinking

* Culture & Social contagion
* Anti-social personality disorder