

Prospect theory (Kahneman and Tversky 1979, *Econometrica*)

Two key ingredients

- Utility function replaced by a value function
- Probabilities replaced by probability weighting function

Properties of the value function

- Depends on differences from a reference level
- Has a kink at the reference level. The derivative of the value function is not defined at the reference level
- Loss aversion: The value function is steeper below the reference point, i.e. $V(x) < V(-x)$
- Diminishing sensitivity: the value function is concave over the domain of gains and convex over the domain of losses. Risk loving over the losses area.

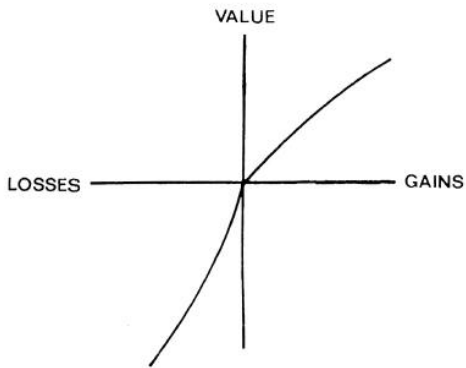


Figure 2

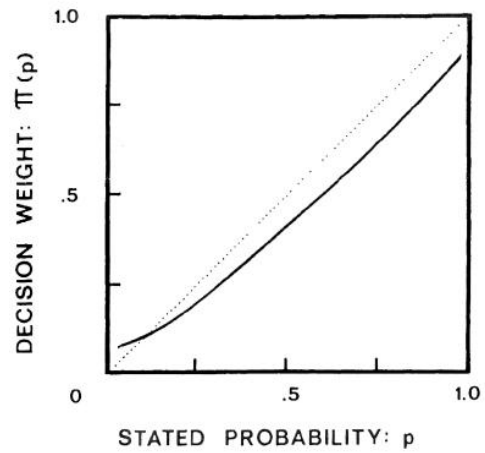


Figure 3

Decision weight: overweight to small probabilities, underweight to high probabilities

Reference dependence and loss aversion have also been found to be important in deterministic set-ups.