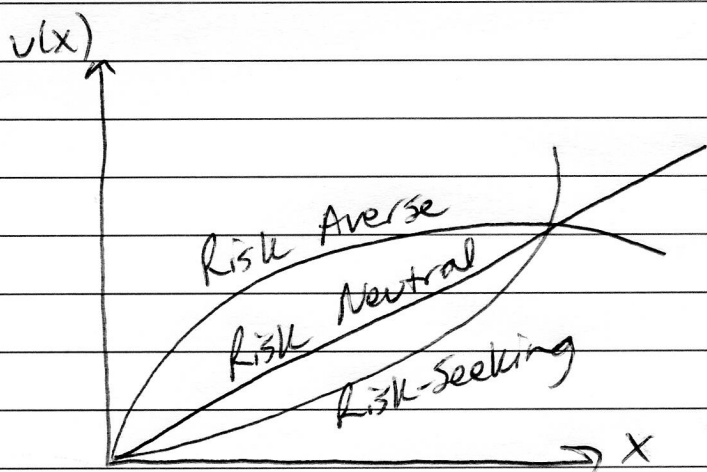




Ex)
$$\left. \begin{aligned} u(x) &= 10x \\ u'(x) &= 10 \\ u''(x) &= 0 \end{aligned} \right\} \text{Linear } u''(x) = 0 \quad \left. \vphantom{\begin{aligned} u(x) &= 10x \\ u'(x) &= 10 \\ u''(x) &= 0 \end{aligned}} \right\} \text{Risk Neutral}$$

$$\left. \begin{aligned} u(x) &= x^{0.8} \\ u'(x) &= 0.8x^{-0.2} \\ u''(x) &= (0.8)(-0.2)x^{-1.2} = -0.16x^{-1.2} \end{aligned} \right\} \text{Risk Averse}$$

$$\left. \begin{aligned} u(x) &= x^3 \\ u'(x) &= 3x^2 \\ u''(x) &= 6x \end{aligned} \right\} \text{Risk Seeking}$$

Bx^a :

if $a < 1$ concave

$a = 1$ linear

$a > 1$ convex

• Measuring Risk Aversion

→ Approach 1: Risk Premiums

* Suppose you have initial wealth w

* Facing a risky prospect that pays a random variable $\tilde{z}$ (may be negative)

* $E\tilde{z} = 0$