- Chapter 2.2, *page 41* **Table 2.1**

Class	Definition	ARA $r(x)$	RRA $rr(x)$	Special properties
Logarithmic	ln(x)	decr.	const.	”Bernoulli utility”

- Chapter 2.2, *page 43*:

  the *midpoint certainty equivalent method.*

- Chapter 2.2, *page 45*:

  $$\frac{1}{2}u(w-l)+\frac{1}{2}(w+g) = u(w)+\frac{1}{2}\left(u'(w)(g-l)+\frac{1}{2}u''(w)(g^2-l^2)+O(g^3-l^3)\right)$$

- Chapter 2.3, *page 49*:

A: =

payoff	0 €	1010 €
probability	99.505%	0.495%

B: =

payoff	-1000 €	10 €
probability	0.495%	99.505%

- Chapter 3.4, *page 131* Table 3.2. The 5th row 6th column **-2.172** stead of 2.172

- Chapter 3.4, *page 134*, the right hand side of last formula, it should be β instead of -β.

  $$\frac{dpt^+(\lambda R_j+(1-\lambda)R_M)}{d\lambda}|_{\lambda=0} = \beta\frac{dpt^+(\lambda R_j+(1-\lambda)R_M)}{d\lambda}|_{\lambda=0}$$

- Chapter 4.4.5, *page 184*, for the quadratic prospect theory value function

  $$v(c_s-RP) := \begin{cases} (c_s-RP)-\frac{\alpha^+}{2}(c_s-RP)^2, & \text{if } c_s \geq RP \\ \lambda\left((c_s-RP)-\frac{\alpha^-}{2}(c_s-RP)^2\right), & \text{if } c_s < RP \end{cases}$$

  ... The likelihood ratio process for the piecewise quadratic utility is:

  $$\delta^i u'(c_0)l(c_s) = \begin{cases} 1-\alpha^+(c_s-RP), & \text{if } c_s \geq RP \\ \lambda\left(1-\alpha^-(c_s-RP)\right), & \text{if } c_s < RP \end{cases}$$

- Chapter 4.4.5, *page 185*,

$$P(R^M \geq R_f) := \sum_{R_s^M \geq R_f} p_s,$$

$$cov^+(R^k, R^M) := \sum_{R_s^M \geq R_f} \frac{p_s}{P(R^M \geq R_f)} \left(R_s^k - E(R^k)\right)\left(R_s^M - E(R^M)\right)$$

$$cov^-(R^k, R^M) := \sum_{R_s^M < R_f} \frac{p_s}{P(R^M < R_f)} \left(R_s^k - E(R^k)\right)\left(R_s^M - E(R^M)\right)$$

The general risk-return decomposition is

$$\begin{aligned} & P(R^M \geq R_f)\left(E^+(R^k) - R_f - \hat{\alpha}^+ cov^+(R^k, R^M)\right) \\ & + \left(1 - P(R^M \geq R_f)\right)\left(E^-(R^k) - R_f - \lambda\hat{\alpha}^- cov^-(R^k, R^M)\right) \\ & = \sum_{R_s^M \geq R_f} p_s \left(R_s^k - E(R^k)\right)\left(\frac{1}{\delta^i u'(c_0)} - \hat{\alpha}^+ \left(E(R^M) - R_f\right)\right) \\ & + \lambda \sum_{R_s^M < R_f} p_s \left(R_s^k - E(R^k)\right)\left(\frac{1}{\delta^i u'(c_0)} - \hat{\alpha}^- \left(E(R^M) - R_f\right)\right) \end{aligned}$$

- Chapter 4.6, *page 195*:

$$\sum_{s_t} \delta_R(t) = \pi_{s_t} \zeta(s_t)^{\gamma_R(s_t)}, \tag{4.3}$$

- Chapter 8.1, *page 299*:

  The trading strategy is defined as follows: at every time t hold one option and $-\partial V(S,t)/\partial S$ **stocks**.... The value of this delta hedge portfolio at time t is $V(S,t) - S(t)\partial V(S,t)/\partial S$.

  ...Therefore, we can equal dR with the incremental return of the risk-free asset of the same amount (which is $V(S,t) - S(t)\partial V(S,t)/\partial S$), i,e....

- Chapter 4.6, *page 196*:

  ...hence the *lower* bound is called the Hansen and Jagannathan bound.

- Chapter 4.9, *page 206*:

  To prove stability, we define a so called "**Lyapunov function**" $L(t) = ||q_t - q^*||^{\mathbf{2}}$.