16 Nov 11

R&R 3 1

p. 55
1. Huiswerk – 2.5.3: elicit & predict
2.5.4
2.6.4 (p. 58): contrast

3.4.7 & 3.6.3

9:42 So far, P or U known. Now both unknown.

2012: 9:50

2. ≥ EU: DUU : $(E_1 : x_1, \ldots, E_n : x_n)$ event-contingent prospect

rel. ↔

SEU: ∃ P on events, $U : \mathbb{R} \to \mathbb{R}$, s.t.

$(E_1 : x_1, \ldots, E_n : x_n) \longmapsto \sum p_j U(x_j)$

represents ≽.

Elicitation method: more difficult.

... !?

Looks daunting.

No more linear eq.,

but continuous.

9:50

2012: 9:55

Top hand ½ Nov 4 2

Now exercises 4.3.1 – 4.3.5
but not from book, but printed
separately.

2017: I did Ex. 4.3.1 as
± 10' graph of Ulaba

4.3.1: they did ± 10 min
10:10: work/book till 10:30
Further timing!

Exercise 4.3.1 — Experiment 1 → from pages handed out separately

Fig. 4.1.1 a):

$$p_1 u(\alpha') + p_2 u(1) = p_1 u(\alpha^0) + p_2 u(0) \quad (10)$$

$$p_1 (u(\alpha') - u(\alpha^0)) = p_2 (u(0) - u(1)) \quad (11)$$

Fig. 4.1.1 b:

$$p_1 u(\alpha^2) + p_2 u(1) = p_1 u(\alpha') + p_2 u(0)$$

$$p_1 (u(\alpha^2) - u(\alpha')) = p_2 (u(0) - u(1))$$

$$p_1 (u(\alpha') - u(\alpha^0)) = p_1 (u(\alpha^2) - u(\alpha'))$$

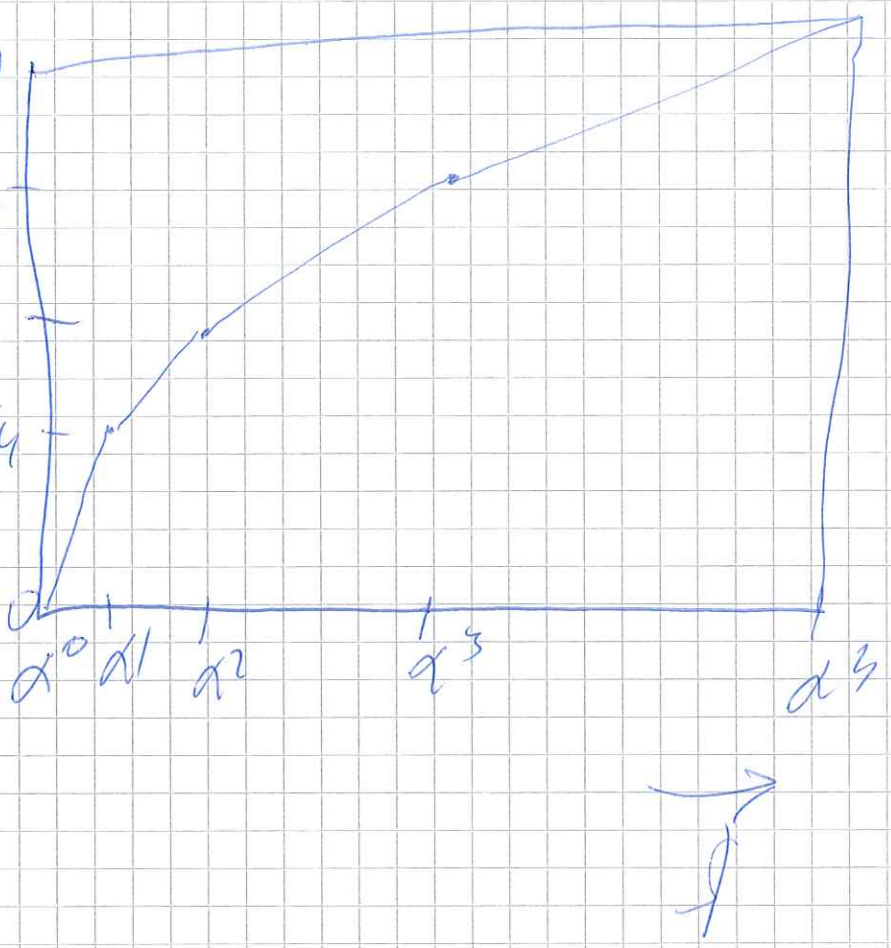
$$u(\alpha') - u(\alpha^0) = u(\alpha^2) - u(\alpha')$$

Similarly: $= u(\alpha^3) - u(\alpha^2) =$

$$u(\alpha^4) - u(\alpha^3)$$

$\alpha^0 \dots \alpha^4$ are equally spaced in utility units.

4 ↑



χ_2 $\alpha^0; \alpha^1, \beta^2, \beta^3, \beta^4$

Ex. 4.3.2 (a) β^s equally spaced:

9, 4, 1, 0, 1, 4, 9

allein zeigen (b) $\beta^s = \alpha^s$ ~~—~~

SE U: $\beta^s \stackrel{!}{=} \alpha^s$

χ_3

Ex. 4.3.3 $\gamma^2 = \alpha^2$

$\gamma^s = \alpha^s$

χ_4

Ex. 4.3.4 $\delta^s = \alpha^s$

They take Fig. 4.1.1 before them.

I put Fig. 4.1.4 up the screen.

Ask them to compare

Fig 4.1.4a with 4.1.1.d

Compare right prospect in 4.1.4a

with left " in 4.1.1.d

Are the same!

then compare left - right

4.1.4d 4.1.1.d

$\delta^3 = \alpha^3$!

Now, with that, compare

Fig 4.1.4b with 4.1.4c

↓ right property = left property ↑

Given $\delta^3 = \alpha^3$, are the same!

So, $\delta^2 = \alpha^2$

$\vdots$

$\delta^0 = \alpha^0$

Ex. 4, 3, 5 (with χ over 3, and 5 over the second 5) $pE^j = j/4$.

Fingers: $\beta^2 = \alpha^2$?

$\gamma^2 = \alpha^2$?

$\delta^0 = \alpha^0$?

$pE^2 = 2/4$?

→ tradeoffs consistency for SEU

Then CCI lecture

11:25 – 11:35

A Palais. Fig 2.2.1 e/f.

Between figs: ? decision