

9:45

R & R 5 1

Or: do here
marginal
revolution
paradox

Last time: Def of RDU. Much time
to show formula makes sense.
Does with prob. what
economists did with von Neumann

So now new component: prob. risk att.

Homo sapiens! Typical of behav. rev.

Learn
New theory

(1) formula intuitive
(don't!)

bla bla
werke
mer
in 2012

(2) Derive decisions
from theory.
Was your homework
(You may have
thought trivial!?)
But did actually
useful.

better they
as homework,
to save time.

(3) efficient method:
homework for
next week.

if homeomorphic

(4) Pref. foundation
to verify sound-
ness.

Prob. risk att.
Now people feel about?
Absolutely needed
to understand risk attitudes

(5) Will come
fixing data? New
phenomena? Coming now

Show 6 shapes to refresh memory
Fig 7.1, p. 205

Putting rank dependence to good use.

Pessimism:

$\pi(p^n)$: increases in r .
ask them about it should depend on r . Only then will so the more unfavorable the outcome.

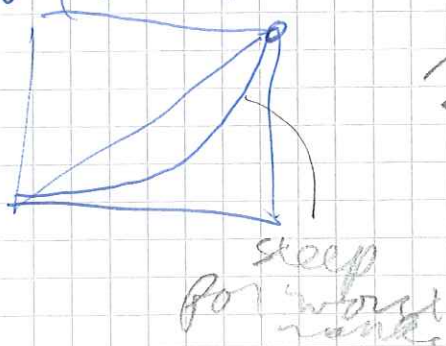
Optimism: decreases

Pessimism:

$w(p+r) - w(r)$ increases in r .

IS JUST CONVEXITY! :

$w(r)$ increases in r .



In $x \succ y$ ($x \geq y$),
 $w(x)$ is weight of best outcome.
So pessimism.

Optimism: W is concave.

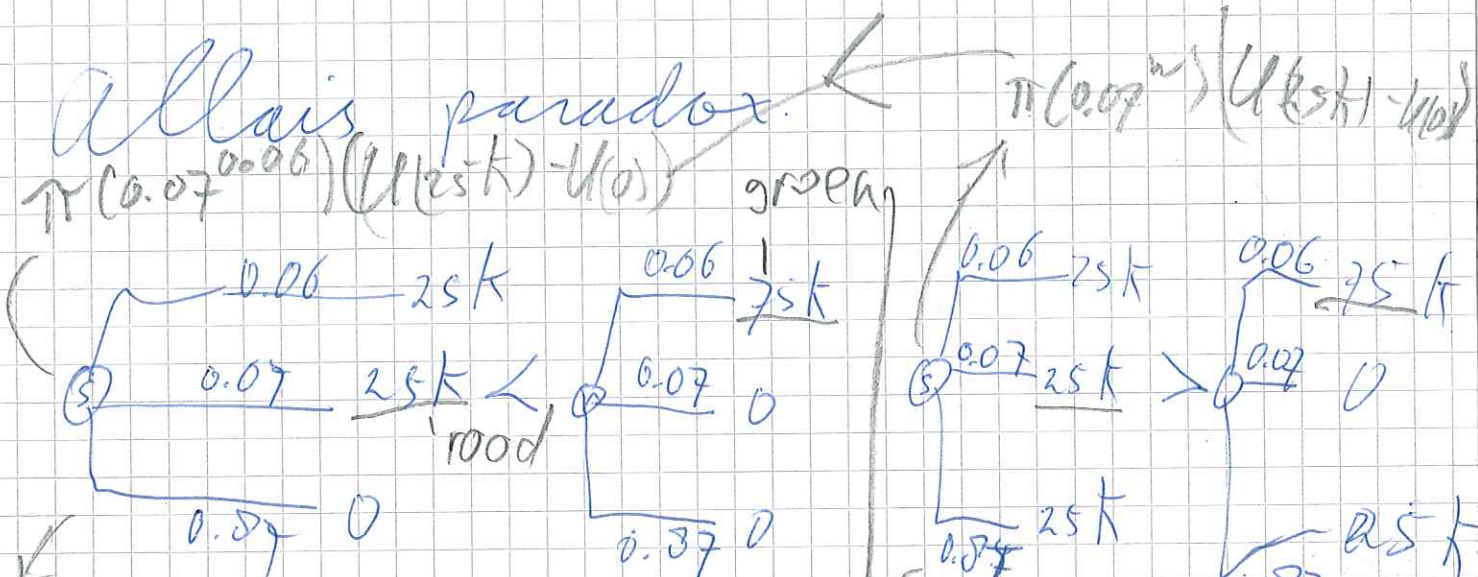
3

risk aversion depends on U & w !!
 attitude

Example/exercise 6.3.1 (p. 175)

Chacourouf / Cohen.

Allais paradox



weights
 $\pi(0.87^w)$
 RDU diff.
 $\pi(0.87^w)$
 $U(0) - U(0)$
 so 0!

Let them think.
 How rank-dep can accom-
 modate.
 TO-thinking

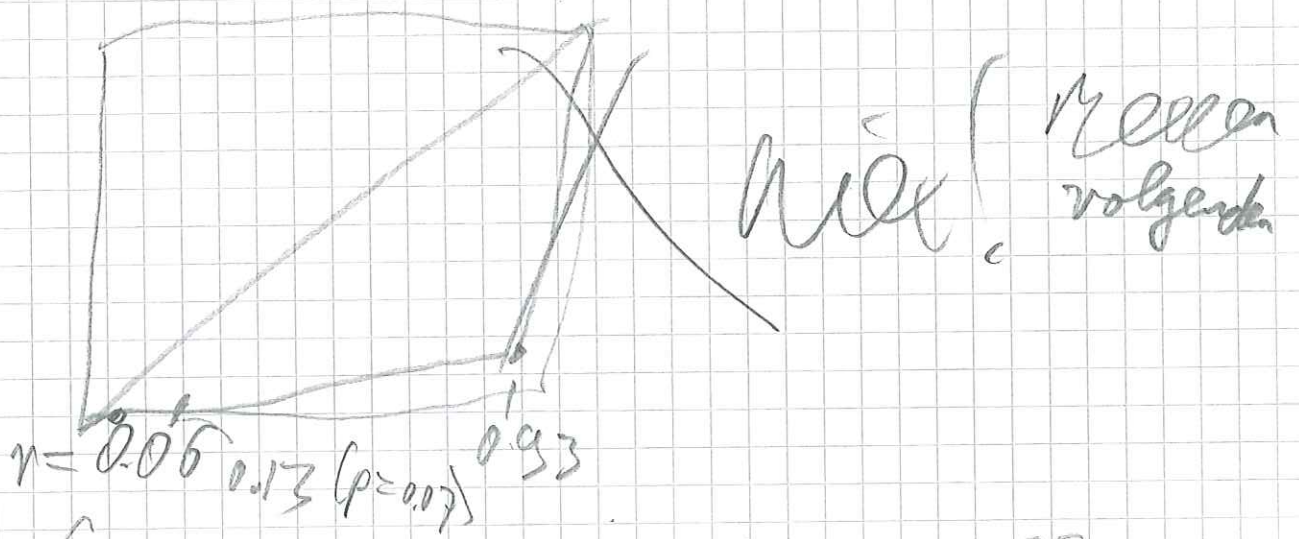
weights
 $\pi(0.87^w)$
 $U(25k) - U(25k) = 0$!

Hint: upper branch always has
 better rank. Weigh $\pi(0.06^b)$
 RDU difference: $\pi(0.06^b)(U(25) - U(25))$

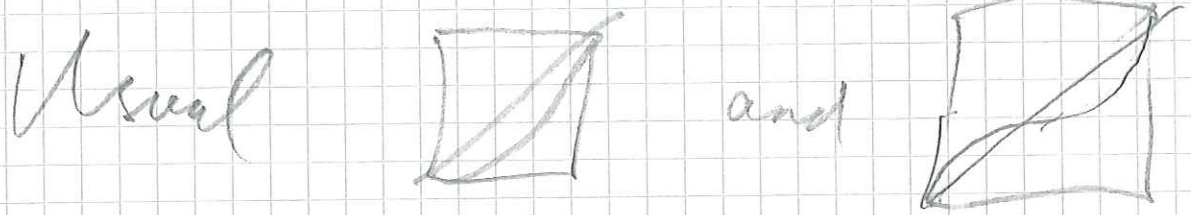
Trick: for each pair in choice } same ranks / dW

2017
 10.19.
 10:30

Tell them to immediately see from figure. Using mind's eye. on previous page 10:37

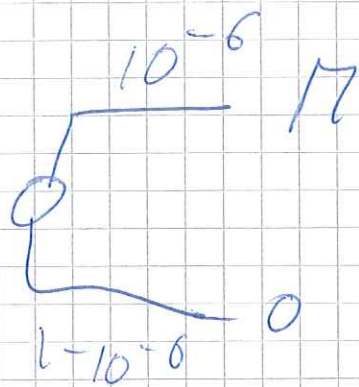


Can accommodate all



can too.

Optimism & pessimism: is ^{ly} realistic.



What is CE?

ASU, with linear U:

$$\pi(10^{-6} b) > 10^{-6}$$

↓
sleep here

So no pessimism here
rather inverse ξ !

put up 6 shapes again
Fig 7.1, p. 205

Pessimism \Rightarrow w convex. Many
mathematical tools.
Convenient!

Inverse ξ : New concept
Data imposed it upon us
Need new theory & mathematicians
& concepts.

Then ppt. on inverse-S

6
2019
11:04-11:10

extremity-orientedness!

11:10
11:20

This is program to turn them into professional rank dep. users. We are out of classical models. Behav. rev. Homo sapiens / Homo economicus

Only then Fig 7.4.1 (p. 215)

put it up on the screen. Explain that violations of 5th pt. Start with case 2.

Explain and label

Pessimist in case 1?

best higher argument protection

>!
Optimist? <!

Pessimist case 3?

>!
Optimist? <!

Inverse-S in case 1?

<!
Case 3? >!

Pessimist goes for safe edge after both changes.

Inderes, First:

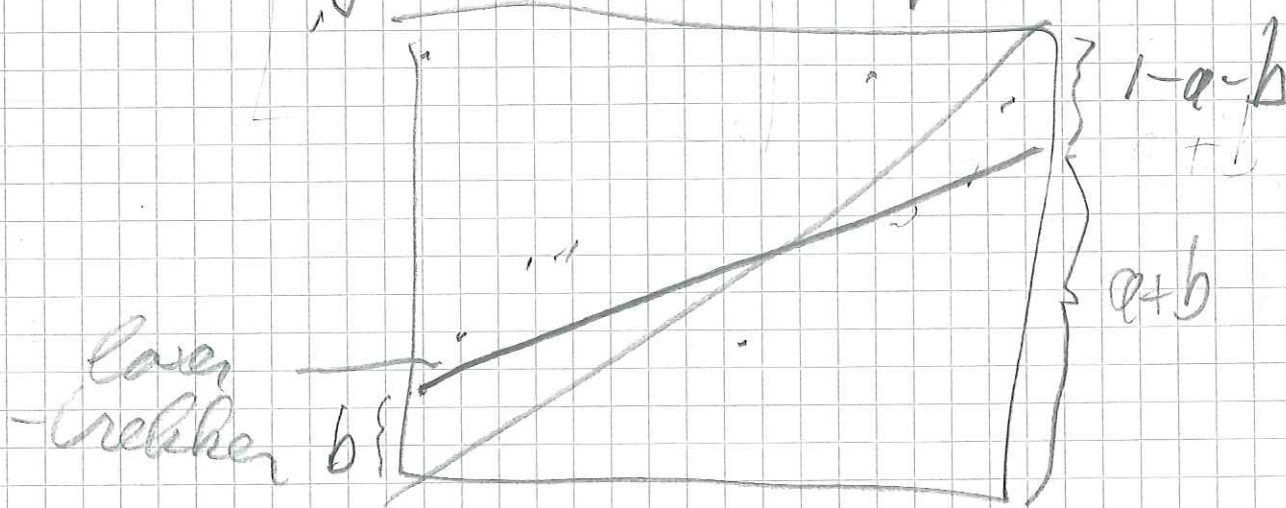
parametric families

Show book pp 205 / 207-208

Neo-additive.

($w(0) = 0$; $w(1) = 1$; $w(p) = b + ap$
used for indexes.

Imagine data points



niet
zeggen

1. Best-fitting or $(0,1)$
 a_i : index of l.h. sensitivity
 $(w(\frac{1}{2})) = \frac{\text{area below line}}{(2b+2a)/2}$ index of optimism
 \rightarrow average of left & right height, $(w(0^+) + w(1^-))/2$