



TENTAMEN / EXAMINATION



12307683

Fylls i av **student** / To be completed by the **student**

Skriv anonymiseringskoden på samtliga svarsblad / Write your anonymity code on each sheet		Anonymiseringskod / Anonymity code	
		N E A D 2 6 - 0 0 1 9 - Z N B	
Provbenämning / Exam name			Oonmald
Skriftlig tentamen			
Kurskod / Course code	Modul / Module	Tentamensdatum / Examination date	
N E A D 2 6	1 0 0 1	2 0 2 1 - 0 9 - 2 4	
Jag har tagit del av regler som gäller vid tentamen / I have read the current rules for examinations		Antal inlämnade blad med anonymiseringskod / Number of sheets with anonymity code	
<input checked="" type="checkbox"/> Ja / Yes		6	

Fylls i av **skrivvakt** / To be completed by the **invigilator**

Kontroll av legitimation / Identification checked	<input checked="" type="checkbox"/> Ja / Yes	Härmed intygas att kontroller utförts / This is to certify that the checks have been carried out
Kontroll av inlämnade blad / Answer sheets checked	<input checked="" type="checkbox"/> Ja / Yes	
Inlämningstid / Time of submission	1 0 : 3 8	Tydlig sign. / Signature AB

Fylls i av **lärare** / To be completed by the **examiner**

Bedömning av uppgifter / Questions attempted										
1	2	3	4	5	6	7	8	9	10	~
11	12	13	14	15	16	17	18	19	20	~
21	22	23	24	25	26	27	28	29	30	~
Totalt antal poäng / Total points					Examin. lärare / Kursansvarig signatur / Signature of the examiner					
10,25										
Betyg / Grade					Namnförtydligande / Clarification of the signature					
G					HENRIK JALDÉN					

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Försättsbladet ska alltid lämnas in även om ingen uppgift behandlats /
Examination should always be submitted even if no questions are answered

Skriv ej i detta område
Leave this area blank

Ange anonymitetskod / Write your anonymity code
(Vid icke anonym tentamen ange kurskod + namn + personnummer)
(For non-anonymous exams write the course code + name + civic registration number)

NEAD26-00A-ZNB

Löpande sidnr
Consecutive no:

6

Uppgift nr /
Question no: 1

Poäng / Points
awarded:

0,5

Lärens
anteckning
Examiner's remarks:

1) You get two types of utility from doing something. Here I will use the example of going on a holiday.

Endowment: Booking and going on holiday get you utility in form of endowment from looking forward to the holiday and when you are on holiday you are happy and relaxed and enjoy your time.

Contrast: However, there is a contrast effect working in the opposite direction of the endowment effect. In this example you get happy from the endowment effect, but the contrast effect gets you negative utility from afterwards missing the trip or being more miserable at work than you were before the trip since you now know how much better you could feel being on holiday in contrast to being at work.

(Perhaps another example could be when you are sick. Being sick gives you immediate negative utility (endowment), in contrast you are later grateful of getting better and appreciate feeling well more than before, i.e., positive utility (contrast effect).)

acquisition
is transaction?

Skriv ej i detta område
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NEAD26-0019-ZNB

Löpande sidnr
Consecutive no:

1

Uppgift nr /
Question no: 3

Poäng / Points
awarded:

0,75*

Lärarens
anteckning
Examiner's remarks:

3 a) Tossing a coin

There are two possible outcomes when tossing a coin: heads or tails and the probabilities of these outcomes occurring are $p=0.5$ each. Thus we know the possible outcomes and their probabilities and therefore this is a risky gamble (objective)

b) Effect of climate change

Here, the possible outcomes are a bit uncertain, there are hypotheses and theories but they are not at all as certain as in the case of tossing a coin. The probabilities are not equal to 1, and the beliefs (π) of said probabilities are most likely not exactly the same as the "true" probabilities. I would therefore define this case as genuine uncertainty

ok (not I don't fail because of this)

c) Getting covid-19

The possible outcomes are getting covid and not getting covid, so those are certain. The probability of getting covid-19 although being fully vaccinated is, however, dependent upon others getting vaccinated and also on other factors such as if you for example work with covid-patients, since that most likely increases the probability. Since we know the possible outcomes but are a bit unsure about the probabilities I would define this case as uncertainty

ok

d) You passing this exam

Outcomes: pass/fail. Probabilities are unknown, therefore uncertainty.

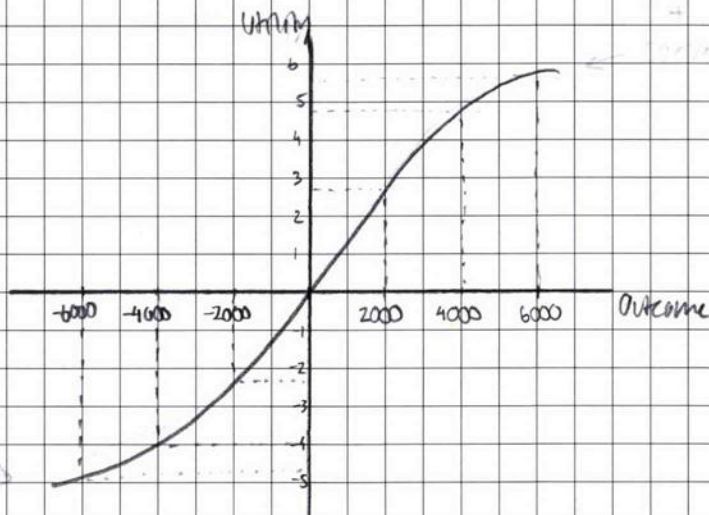
ok

	Probabilities P	Belief π	Possible Outcomes X
Certainty	$=1$	$=P$	known
Risk	$= (1-p)$	$= (1-p)$	known
Uncertainty	unknown	$\neq (1-p)$	known
Genuine uncertainty	unknown	-	unknown

objective subjective (depend on if we assume the same probabilities or not)



4 a)



This means that the person is risk averse when it comes to negative outcomes, but risk seeking when it comes to positive outcomes.

$$\text{Adding } U(2000) + U(4000) = 2,7 + 4,8 = 7,5 > 5,6 = U(6000)$$

made-up numbers,
see graph

$$\text{Adding } U(-2000) + U(-4000) = (-2,2) + (-4) = (-6,2) < (-4,9) = U(-6000)$$

- b) In the expected utility function, EUT, a person's utility function and preferences are assumed to remain the same for both gains and losses.

EUT!
IF MAKE OUTCOMES

- c) In prospect theory, you count each gain/loss for themselves and you have loss aversion.
 Losing -2000 and then losing -4000 is worse than losing -6000 right away (losing twice < losing once)
 whereas winning 2000 and then winning again 4000 is better than winning 6000 right away (winning twice > winning once)

CHANGES IN
FINAL OUTCOMES

Skriv ej i detta område
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Löpande sidnr
Consecutive no:

3

5 a)

$$I: 1500 > \frac{2500}{(1+r)^2}$$

$$(1+r)^2 > \frac{2500}{1500}$$

$$r > \sqrt{2500/1500} - 1$$

$$r > 0,29$$

The discount rate is greater than 0,29

$$II: \frac{1500}{(1+r)^5} < \frac{2500}{(1+r)^7}$$

$$\frac{(1+r)^7}{(1+r)^5} < \frac{2500}{1500}$$

$$(1+r)^2 < \frac{2500}{1500}$$

$$r < 0,29$$

The discount rate is less than 0,29

- b) According to SEM, most people should prefer A and C, or B and D since the time between the options are 2 years in both I and II and the amount of cash is the same (1500 and 2500). According to SEM, peoples preferences are static, i.e., does not change over time.

Uppgift nr /
Question no: 5

Poäng / Points
awarded:

1,5

Lärarens
anteckning
Examiner's remarks:

Skriv ej i detta område
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Löpande sidnr
Consecutive no:

4

Uppgift nr /
Question no: 6

Poäng / Points
awarded:

Lärens
anteckning
Examiner's remarks:

b a) $D(t)$: ... at time t . **DISCOUNT FUNCTION**

β : hyperbolic time preferences? multiplied by discount δ

δ : Discount factor

b) It implies that as time goes - a person's preferences change due to β .

(If you are to decide now ($t=0$) between say two games in the future where game 1 is in $t=1$ and game 2 is in $t=2$)

- $\beta = 1$: constant discounter
- $\beta < \beta = 1$: Naive (believe you are constant discounter, but are not)
- $\beta = \beta < 1$: Sophisticated (know you are not a constant discounter and can make "right" choices based on that knowledge)

If you have $\beta = 1$, then you discount according to δ at all times.

If you have $\beta < 1$ you're discounting hyperbolically, i.e. less weight on the future

example: A) $\delta = 0.5$ $\beta = 1$ $U_0 = 0.8$ $U_1 = 2$

B) $\delta = 0.5$ $\beta = 0.7$ $U_0 = 0.8$ $U_1 = 2$

$t=0$ $t=1$

A $D(0) = 1$ $D(1) = 1 \cdot 0.5 = 0.5$
 $U = 1 \cdot 0.8 = 0.8$ $U = 0.5 \cdot 2 = 1$ $(0.8 < 1)$

B $D(0) = 1$ $D(1) = 0.7 \cdot 0.5 = 0.35$
 $U = 1 \cdot 0.8 = 0.8$ $U = 0.35 \cdot 2 = 0.7$

hyperbolic discounter puts less "weight" into the future. ($0.8 > 0.7$) than the constant β discounter

