



Faculty of Science



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Show me the money!
Slide 1



What is the one and most important feature that virtually all environmental DCE surveys have in common?

The cost (or price) attribute

- The money metric is necessary for retrieving WTP estimates
- Ensures trade-offs being made (relevant in “positive-changes-only” DCEs)

What happens if respondents don't take this attribute seriously?

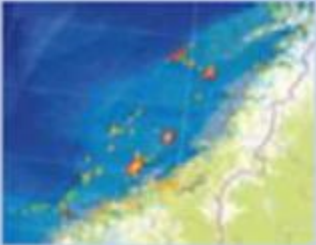


- $B_{\text{cost}} \rightarrow 0, WTP \rightarrow \infty$

Hypothetical bias

When preparing our questionnaires, do we pay enough attention to the cost attribute?

- **Do respondents??**



Attribute		Alternative 1	Alternative 2	Alternative 3 (SQ)
Size of the protected area		10 000 sq. km.	5 000 sq. km.	2 500 sq. km.
Attractive for the industry		Attractive to oil and gas	Attractive to the fisheries	Somewhat attractive to both
Important habitat for fish		Important	Not Important	Somewhat Important
Cost per household per year		NOK 200/year	NOK 500/year	NOK 0/year
I prefer				

Does it matter how cost is presented?

Feinberg, 1986; Prelec and Loewenstein, 1998:

$$\text{WTP}(\text{credit card payment}) > \text{WTP}(\text{cash payment})$$

Payment form matters (Raghubir and Srivastava, 2008)

- relates to differences in the physical appearance of money.
- contributes to the transparency of the payment, i.e. the strength of which the decision maker “feels” the outflow of money, with cash being the most transparent payment mode

Our hypothesis: Illustrations of the costs help respondents to better realize and “feel” the actual out-of-pocket payment implied by a hypothetical choice



Our hypothesis:

Illustrations of the costs help respondents to better realize and “feel” the actual out-of-pocket payment implied by a hypothetical choice

We investigate payment form effects using four treatments:

1. Just a number (standard approach),
2. Generic symbols of money
3. Pictures of the largest possible denominations of Danish currency
4. Pictures of smaller denominations of Danish currency.

Case: DCE concerning preferences for different riparian buffer strip management.

About 270 respondents in each sample split



Nuværende situation



2m randzoner med græs,
ingen grusstier



Begrænset høstning (kun græs)



Ingen konstruerede vådområder



Ingen forbedring af vandområdernes tilstand

0 kr. / år

Politikforslag A



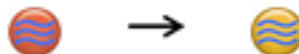
9m randzoner med energiafgrøder,
med grusstier



Ubegrænset høstning (al bevoksning)



10 % konstruerede vådområder



Lille forbedring af vandområdernes tilstand

120 kr. / år

Politikforslag B



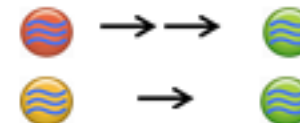
2m randzoner med græs,
ingen grusstier



Begrænset høstning (kun græs)










Ingen konstruerede vådområder






Stor forbedring af vandområdernes tilstand

480 kr. / år

 0 kr. / år	 120 kr. / år	 240 kr. / år	 480 kr. / år
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 960 kr. / år	 1560 kr. / år	 2400 kr. / år
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WTP ↓

 0 kr. / år	 120 kr. / år	 240 kr. / år	 480 kr. / år
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 960 kr. / år	 1560 kr. / år	 2400 kr. / år
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WTP ↓ ↓

 0 kr. / år	 120 kr. / år	 240 kr. / år	 480 kr. / år
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WTP ↓ ↓ ↓

Show me the money!
Slide 7



Very preliminary results

MNL models in WTPspace, relative to control:

- Big denominations lead to *decrease* in WTP for 8 out of 11 attribute levels (significant for 4 of them)
 - But also significant *increase* for 1 attribute
- and no significant effects for small denominations and generic illustration

Three-class LC models with w. differing price sensitivity and treatment dummies in class membership function

- Generic illustration treatment borderline significant in class with lower price sensitivity

RPL prefspace model on merged data with treatments in scale function and separate cost estimates for each treatment

- Generic illustration treatment has significantly lower scale
- Otherwise nothing of interest...



ToDo (ideas are much appreciated!!!)

- Separate RPL models, comparing WTPs
- More flexible LC models with demographics incorporated in membership as well as questions concerning their usual method of payment (cash, credit card, mobilepay, etc.) and incorporating cost non-attendance more directly
- RUM vs RRM in LC-model. Hypothesis: Real money will make respondents tend to resort to regret behavior
-What else??





More information on
<http://www.ifro.ku.dk/English>

Show me the money!
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