Assessing recreation values of Střížovický vrch by contingent valuation method: problems and experiences

Mgr. Petr Lupač

Department of Sociology
Faculty of Arts, Charles University

E-mail: petr.lupa@centrum.cz
Introduction

• Střížovice peak next to Klíše district in Ústí nad Labem

• Business plan to build up a sport-recreational complex in the Střížovice peak area – roofed downhill skiing, swimming pools

• Formation of a civic movement that question procedure of land-use planning, a public debate begins

• Use of contingent valuation method under conditions of independent student research
Actual state of Střížovice peak – variant B

Source: author
Projected look at the Střížovice peak – variant A

Source: investor
General information - survey

- Sample: N=328
- On-site survey, standardized interview
- Quota sampling (citizen of Ústí nad Labem, sex, age, education; district was not chosen as a quota but interviewers were allocated all around the town), sampling frame: ČSÚ
- Interviewer’s network: 17 instructed students of FŽP UJEP
- Specific form of CVM used in questionnaire according to Czech Ecological Institute’s use of CVM in Tmaň, 1995 (controversial building of a cement factory)
**Anticipated problems and used solutions**

**Flaws entering the research:**

- Unawareness of social environment, historical and symbolical dimensions of evaluated object
- A problem of respondents who reveal false preference
- Flaws based on reduced perceiving of evaluated object (evaluation of uneven objects)
- Willingness to pay in hypothetic markets can differ from a real willingness to pay.
- Suggestibility (choice of questions, choice of information)
- Unsatisfactory understanding of the act of evaluation

**Used solutions:**

- Brainstorming with locals
- Questioning sensitivity to environment
- Inserting questions focused on symbolical dimension of Střížovice peak, preferred spending leisure time and non-residential buildings constructions
- Reduction of the difference by inserting a question evoking market context
- Emphasis on even introduction to benefits and problems of both variants, interviewer’s network training
- Pre-research, pilot study
The structure of the questionnaire

a. Sociodemographic indicators (QA-QD, Q12-Q15)

b. Questions about leisure time spending (Q1-Q4)

c. Attitudes to problems of an environment in general (Q7)

d. Attitudes to problems of a local environment (Q9)

e. Respondent chooses one scenario and reasons his/her choice (Q901-Q902)

f. Evaluation by those who have chosen scenario B>
   I. Question evoking the market situation – the paying card (Q10)
   II. Expression of the subjective monetary value that would be paid for a long period (15 years) in the case of scenario B (Q11)
The act of evaluation

Step I.
• Explanation why expenses will rise if no sport complex would be built (variant A).

Imagine the situation if no area Eden park would be built. There will be no new jobs and town hall will not be accepting a rent for at least 15 years. As a result, some local fees and town services could be more expensive.

• Estimated increase of expenditure using the paying card.

Step II.
• Respondent initiated to the necessity of money expense.
• Prompt to consider previous valuation and long-term payment aspect.

Carefully consider and specify the highest amount of money that you would be willing to pay personally every month for a long time (15 years – estimated technological lifespan of the sport center) only for substitute the variant A for the variant B. ASSUME THAT WITH REALIZATION OF THE VARIANT B NO LOCAL FEES WOULD CHANGE. NOW YOU CAN CHANGE COMpletely THE FIGURE NAMED IN PREVIOUS QUESTION. TAKE THE NET MONTH INCOME OF YOUR HOUSEHOLD PER HEAD AND CONSIDER WHAT MAXIMAL SUM OF MONEY WOULD BE BEARABLE FOR YOU PERSONALLY?

• Spontaneous utterance of a sum of money that a respondent would be willing to pay
**Questionnaire – part VII (Q10-Q11)**

10) **ODPOVÍDAJÍ JENOM TI, KTERÍ VOLÍ VARIANTU B V OTÁZCE 901.** Představte si situaci, kdy nebude vybudován areál Eden park. Nebudou vytvořena nová pracovní místa a město přijde o příjem z pronájmů po dobu min. 15 let a v důsledku by tak mohlo dojít ke zvýšení některých místních poplatků a cen městských služeb. **O KOLIK BY SE V TETO SOUV ČLUSTI S PŘIJETÍM VARIANTY B MOHLÝ ZVÝŠIT MĚSÍČNÍ VÝDAJE VAŠÍ DOMÁCNOSTI, ABYSTÉ STÁLE VOLÍL VARIANTU B?** Vyberte sumu, která je nejblíže zvolené částce.

| Předložte kartu 10, zakroužkujte odpověď |
|---|---|---|---|---|
| 0 | 50 | 150 | 300 | 500 a více |
| 1 | 60 | 160 | 320 |
| 3 | 70 | 170 | 340 |
| 5 | 80 | 180 | 360 |
| 10 | 90 | 190 | 380 |
| 15 | 100 | 200 | 400 |
| 20 | 110 | 220 | 420 |
| 25 | 120 | 240 | 440 |
| 30 | 130 | 260 | 460 |
| 40 | 140 | 280 | 480 |

**Předložte kartu varianty „A“ a kartu varianty „B“**

11) Tato otázka je velmi důležitá. Pečlivě zvažte a upřesněte, jakou nejvyšší částku byste byl/a vy osobně ochoten (ochotna) platit každý měsíc po dlouhou dobu (15 let - technologická životnost areálu) jen za to, že bude varianť A nahrazena variantou B. **PŘEDPOKLADEJTE, ŽE REALIZACI VARIANTY B BY SE VAŠE MÍSTNÍ POPLATKY NEZMĚNÍLY. ČÁSTKU STANOVENOU V MINULÉ OTÁZCE MŮŽETE NYNÍ ZCELA ZMĚNIT. VEMTE V ÚVAHU ČISTÝ MĚSÍČNÍ PŘÍJEM NA HLAVU VE VAŠÍ DOMÁCNOSTI A ZVAŽTE JAKÁ MAXIMÁLNÍ ČÁSTKA BY BYLA PRO VAS OSOBNĚ ÚNOŠNÁ?**

Jsem ochoten (ochotna) platit každý měsíc maximálně ……………………………… Kč.
Results

- 66.5% (218) have chosen scenario B - not to build.
- If we only count for figures that are lower than 100 Kč, then the average is 49,– (10x higher than „needed“)
- People who have chosen scenario A more inclined to assess local environmental problems as really serious after introduction of scenarios (difference was statistically significant for α=0.001).
Results of valuation

- Spontaneous utterance of a sum of money that a respondent would be willing to pay for a long time

78% cases

average: 35,93 Kč

N = 169
Lessons from the survey

• We located strong “hypothetical bias” that is reflected by “banknote’s efect”¹)
  – We recommend to emphasize the long-term aspect of payment (in similar surveys)

• Trained interviewer’s net is needful

¹) The same distribution was present in results from Tmaň survey (1995)