Web Appendix: "Loss Aversion and Consumption Choice: Theory and Experimental Evidence"

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1 Alternative Estimation

Alternatively, it could be assumed that individual expectations are simply shaped by the price–lottery–weighted sample mean of y_k conditional on participants' taste difference and degree of loss aversion as presented in Table 1, i.e., $\hat{x}_k = mean(y_k|\Delta t_k, \lambda_k)/2 + 1/2$. This also leads to similar second–stage estimation results as those reported in columns (3) and (4) in Table 2 in the article.

Table W1: Probability of Choosing the Cheaper, Less Tasty Sandwich: P_k

	Logit: Naive Expectations		Logit: Rational Expectations		Logit: No Loss Aversion	
	(1)	(2)	(3')	(4')	(5)	(6)
Loss Price	1.063**	1.114**	0.891**	0.917**		
	(0.040)	(0.035)	(0.033)	(0.031)		
Taste Diff.	-1.632***	-1.675***	-1.409***	-1.444***	-1.544***	-1.585***
	(0.002)	(0.002)	(0.008)	(0.009)	(0.002)	(0.002)
Low Meal Ex.	1.340**	1.349**	1.228**	1.226**	1.073**	1.077**
× Taste Diff.	(0.013)	(0.015)	(0.020)	(0.023)	(0.033)	(0.035)
Meal Ex.	0.101	0.072	0.094	0.066	0.124	0.102
	(0.557)	(0.701)	(0.596)	(0.733)	(0.459)	(0.571)
Age		0.049		0.047		0.047
		(0.550)		(0.568)		(0.543)
Gender (M.)		0.624		0.606		0.520
		(0.299)		(0.314)		(0.362)
Constant	-0.837	-2.291	-0.884	-2.254	0.276	-1.029
	(0.400)	(0.281)	(0.376)	(0.284)	(0.739)	(0.591)
N. Obs.	73	73	73	73	73	73
Pseudo R2	0.2029	0.2203	0.2074	0.2236	0.1536	0.1681

Table W1: Loss Price equals $(\lambda_k - 1)\hat{x}_k$, where $\hat{x}_k$ describes the first–stage estimate for participants' ex ante probability of choosing the cheaper sandwich. In the logit regressions with naive expectations, the sample mean is used as first–stage estimate for $\hat{x}_k$, i.e., $\hat{x}_k = 1/2 \cdot mean(y_k) + 1/2$, while in the second specification an individual–specific estimate is used (see above or footnote 21 in the article). The third specification does not consider loss aversion. P-values are in parentheses. Significance at the 1%, 5%, and 10% level is denoted by ***, **, and *, respectively.

2 Instructions

School of Law & Economics
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Dear participants

first, we would like to thank you for your participation in this experiment. The experiment won't last longer than 50 minutes. All of your information provided will be treated strictly anonymously. Therefore, please do not put your name on the questionnaire.

The experiment consists of two parts. In the **first part** you will be served two sandwich samples of the same quality. After tasting both of them, you will have to choose the one you would like to have for lunch after the experiment is finished. One sandwich will cost you 4 Euro, whereas the other sandwich will cost 5 Euro. As a participant, you will receive the total amount of 6 Euro for the first part of this experiment, i.e. in the end you will receive the sandwich you choose and the money left from your budget, either 1 or 2 Euro.

PART ONE procedure:

a) Please taste both sandwich samples
b) Please evaluate the taste of each sandwich
c) The experimenter will announce the prices of the sandwiches
d) Please choose the sandwich you like

In the **second part** of the experiment you are required to fill in the questionnaire attached and to specify which lotteries (out of a series of lotteries) you would like play. For your participation in the second part of the experiment you will receive 2 Euro. It depends then on the lottery you choose and their outcomes, whether you gain up to an additional Euro or lose up to one. So, your payoff in the second part will be between 1 and 3 Euro.

PART TWO procedure:

e) Please fill in the questionnaire
f) Please decide which lotteries you would like to play
g) One lottery will be randomly selected and played out
h) You will receive the sandwich you chose in part one and your payoff in both part one and part two by submitting a payoff receipt
i) Enjoy your sandwich!

If you still have questions on how you should proceed, please ask the experimenter. Otherwise, please turn and start with part one.

PART ONE

Please keep the experimental lab clean. Thank you!

a)

1. Please taste the sandwich 1.

2. Please taste the sandwich 2.

b)

1. How did you like the sandwich 1? Please put a cross in a box below according to your preferences.

   strongly dislike ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 strongly like

2. How did you like the sandwich 2? Please put a cross in a box below according to your preferences.

   strongly dislike ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 strongly like

c)

1. The price of the sandwich 1 is ___ Euro. Please fill in the price.

2. The price of the sandwich 2 is ___ Euro. Please fill in the price.

d) Please decide on which of the two sandwiches you would like to buy. Keep in mind that you can buy only one sandwich, i.e. either sandwich 1 or sandwich 2.

I would like to buy sandwich ___.

PART TWO

e) Please fill in the questionnaire:

Personal information:

1. Prices being equal, which sandwich would you have chosen?
   Sandwich ___

2. Did you have a sandwich for lunch yesterday? (No/Yes. If yes, which kind of?)
   No ☐ Yes ☐ _____

3. How much do you spend on average for lunch (on a weekday) in case you eat out (i.e. in case you don't cook by yourself)?
   ___ Euro

4. How often do you have lunch out per week?
   ___ times

5. How old are you?
   ___

6. What is your sex?
   female ☐ male ☐

7. In which semester are you?
   ___ semester

8. Do you work during your studies in order to earn some money? (No/Yes. If yes, how much do you earn a month?)
   No ☐ Yes ☐ approx. _____ euros

f) Decision about playing a lotteries:

In the following a number of lotteries will be presented to you each of which you can either play or not. The lotteries of one series differ in the amount of money you may lose. The series of lotteries, in turn, differ in the probability of winning or losing. By the end of part two, one lottery will be randomly selected and played in order to determine your payoff. For the second part of the experiment you have 2 Euro at your disposal. The maximal amount of Euros you can win or loose is 1 Euro. Thus, your payoff in this part will be either 1 or 3 Euro.

Here is an **example**:

Example: Lottery series Z

Gains **1,00 euro** Winning probability **50%**

Losses **see below** Loss probability **50%**

Losses	X	X	☐	☐	☐	☐
	-0,10 euro	-0,20 euro	-0,30 euro	-0,50 euro	-0,70 euro	-1,00 euro

- ➔ The crosses above indicate that you would play a lottery of series Z until a loss 20 cents.
- ➔ If the lottery with a loss of -0,10 Euro was randomly selected, then you would win an additional 1 Euro with the probability of 50% or loose -0,10 Euro with the probability of, again, 50%. Hence, your payoff in this case would be either 3 Euro or 1,90 Euro.
- ➔ If the lottery with a loss of -0,30 Euro was randomly selected, you would not win or lose anything as you decided not to play in this case, i.e. your payoff would remain 2 Euro.

Please ask the experimenter if there is something unclear about how you should proceed. If the instructions are clear, please consider the following lotteries, as it has been described in the example above.

In the following please decide between the **lottery A** and a **secure payment**:

Lottery A:

Gains **1,00 euro** Winning probability **50%**

Losses **0,00 euro** Loss probability **50%**

Secure payment:

Payment A (**see the table below**)

Please decide between lottery A and a secure payment A line by line. Please cross one alternative per line!

Table	**Lottery A**	**Secure payment**
Line 1	Lottery A ☐	A=0,10 euro ☐
Line 2	Lottery A ☐	A=0,20 euro ☐
Line 3	Lottery A ☐	A=0,30 euro ☐
Line 4	Lottery A ☐	A=0,40 euro ☐
Line 5	Lottery A ☐	A=0,50 euro ☐
Line 6	Lottery A ☐	A=0,60 euro ☐

Lottery series B

Gains **1,00 euro** Winning probability **33,3%**

Losses **see below** Loss probability **66,7%**

Please cross every lottery of the series **B** that you would like to play!
(0 to 6 crosses are possible)

Losses	☐ -0,10 euro	☐ -0,20 euro	☐ -0,30 euro	☐ -0,50 euro	☐ -0,70 euro	☐ -1,00 euro

Congratulations! You have completed the second part of the experiment. Please wait till your questionnaire will be collected by the experimenter and sign your payoff receipt. Thank you for your patience/participation!

Please feel free to express any kind of comments you have on this experiment. Thank you!

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