Online Appendix

Traxler, C., F.G. Westermaier, and A. Wohlschlegel (2017) 'Bunching on the Autobahn?'

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I. Online Survey: Complementary Material

I.1 Main Survey Questions

1. **Consequences of Speeding**

   In four sequential questions, participants are confronted with four different levels of speed, X_j, which are randomly and independently drawn from $X_1 \in \{19, 20, 21\}, X_2 \in \{24, 25, 26\}, X_3 \in \{29, 30, 31\}, X_4 \in \{34, 39\}$.

   Imagine you are notified about a speeding fine for a violation of the speed limit on a motorway. What is your estimate of the speeding fine for exceeding the speed limit by X_j kilometers per hour? (*Indicate the monetary fine in euro; response in integer values.*)

2. **Penalty Increases**

   At which values, if any at all, do the penalties for speeding increase? For example, select 19 km/h when you think the penalty for driving 19 km/h above the limit is greater than for a speed of 18 km/h above the limit. (*Please select only one of the response options per line.*)

19 km/h...	20 km/h...	21 km/h over limit	none of these values
24 km/h...	25 km/h...	26 km/h over limit	none of these values
29 km/h...	30 km/h...	31 km/h over limit	none of these values
39 km/h...	40 km/h...	41 km/h over limit	none of these values
49 km/h...	50 km/h...	51 km/h over limit	none of these values

3. **Avoiding a penalty**

   In case of speeding, do you try to avoid higher penalties by staying under a certain threshold?

   Yes / More likely Yes / More likely No / No / I never speed

4. **Relevant Speed for determining Penalty (1)**

   Do you know the official deduction rule (*Toleranzabzug Regel*) for computing the speed level which is then relevant for determining the penalties?

   Yes / Not exactly / No

5. **Relevant Speed for determining Penalty (2)**

   Subjects who answered the previous question with 'No' skipped this one.

   By how many percent does the official deduction rule subtract from the measured speed?

   By 0% / 1% / ... / 9% / 10% (11 options)

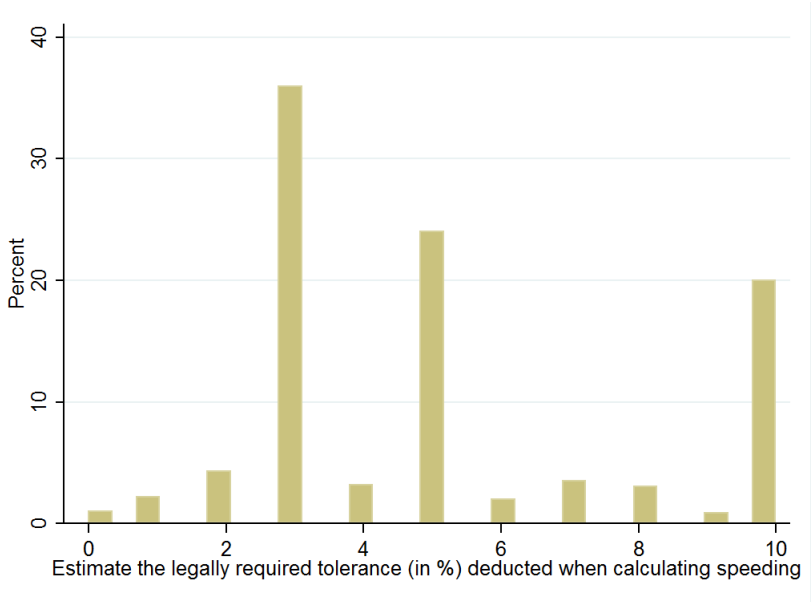
I.2 Complementary Survey Evidence

Table A.1: Summary statistics – Survey data

Variable	*Mean*	*Std. Dev.*
Age (in years)	43.324	13.986
Male	0.477	0.501
Drive car every day	0.541	0.499
Drive on Autobahn regularly	0.616	0.487
Speeding ticket within last 2 years*	0.275	0.447
Penalty point record*	0.122	0.327
Aware of tolerance rule	0.933	0.251
Speed at slightly below threshold*	0.848	0.359
Survey duration (minutes)	5.593	3.362

Notes: The table presents summary statistics for the online survey. The number of observations is $N = 980$. * indicates variables which are only available for sub-samples.

Figure A.4: Expected tolerance rule deductions (in percent)



Notes: The bar graph represents the fraction of respondents who expect the tolerance rule to deduct 0, 1, ..., 10 percent of the measured speed. (See survey question 5 from Online Appendix, above.)

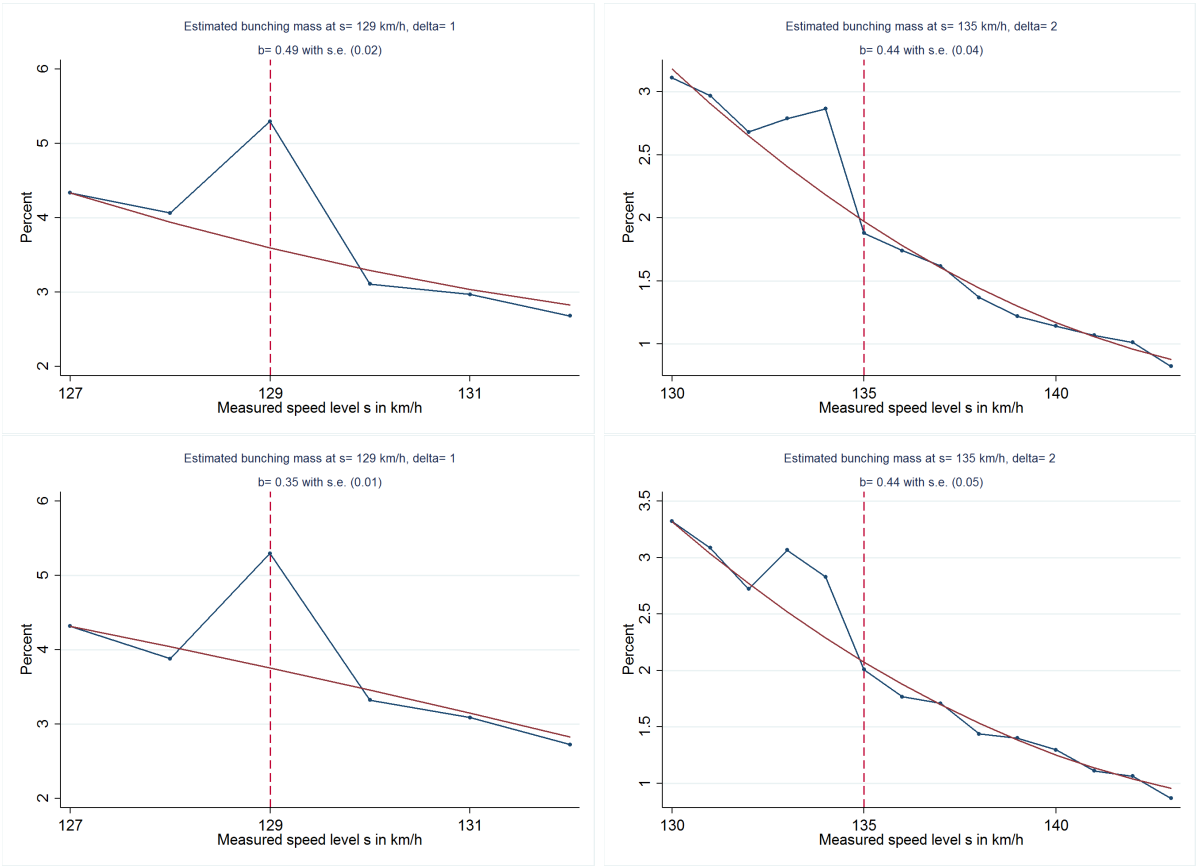
II. Additional Evidence

Table A.2: Robustness of Bunching estimates

Cutoff & Bunching Range	*Polynomial Degree*	*Range for estimation in speed s*	*Pooled data*
$x_i = 125$ with $\delta = 1$	1	127	0.36
$(s = \{128, 129\})$		132	(0.01)
$x_i = 125$ with $\delta = 1$	2	127	0.36
$(s = \{128, 129\})$		132	(0.01)
$x_i = 125$ with $\delta = 1$	3	127	0.37
$(s = \{128, 129\})$		132	(0.00)
$x_i = 125$ with $\delta = 1$	2	126	0.70
$(s = \{128, 129\})$		131	(0.45)
$x_i = 125$ with $\delta = 1$	2	126	0.30
$(s = \{128, 129\})$		133	(0.25)
$x_i = 125$ with $\delta = 2$	2	127	0.28
$(s = \{128, 129, 130\})$		132	(0.00)
$x_i = 130$ with $\delta = 2$	1	130	0.30
$(s = \{133, 134, 135\})$		143	(0.11)
$x_i = 130$ with $\delta = 2$	2	130	0.42
$(s = \{133, 134, 135\})$		143	(0.03)
$x_i = 130$ with $\delta = 2$	3	130	0.47
$(s = \{133, 134, 135\})$		143	(0.04)
$x_i = 130$ with $\delta = 2$	2	129	0.40
$(s = \{133, 134, 135\})$		142	(0.31)
$x_i = 130$ with $\delta = 2$	2	129	0.27
$(s = \{133, 134, 135\})$		144	(0.27)
$x_i = 130$ with $\delta = 1$	2	130	0.45
$(s = \{133, 134\})$		143	(0.02)

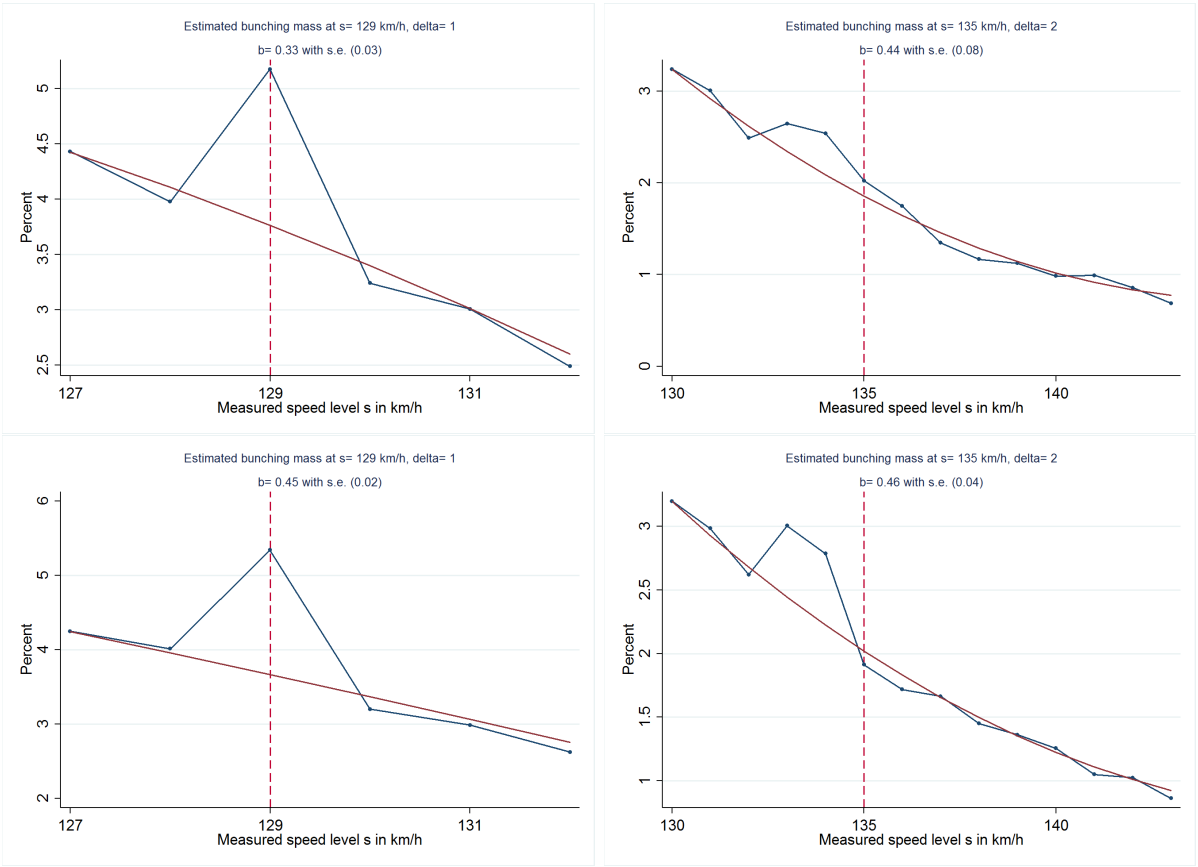
Notes: The table displays the sensitivity of bunching estimates $\hat{b}_i$ for the cutoffs analyzed in Figure 7. x_i indicates the cutoff (in terms of penalty-relevant speed), s is the measured speed and δ captures the width of the bunching area.

Figure A.5: Bunching estimates for sample splits: Local drivers



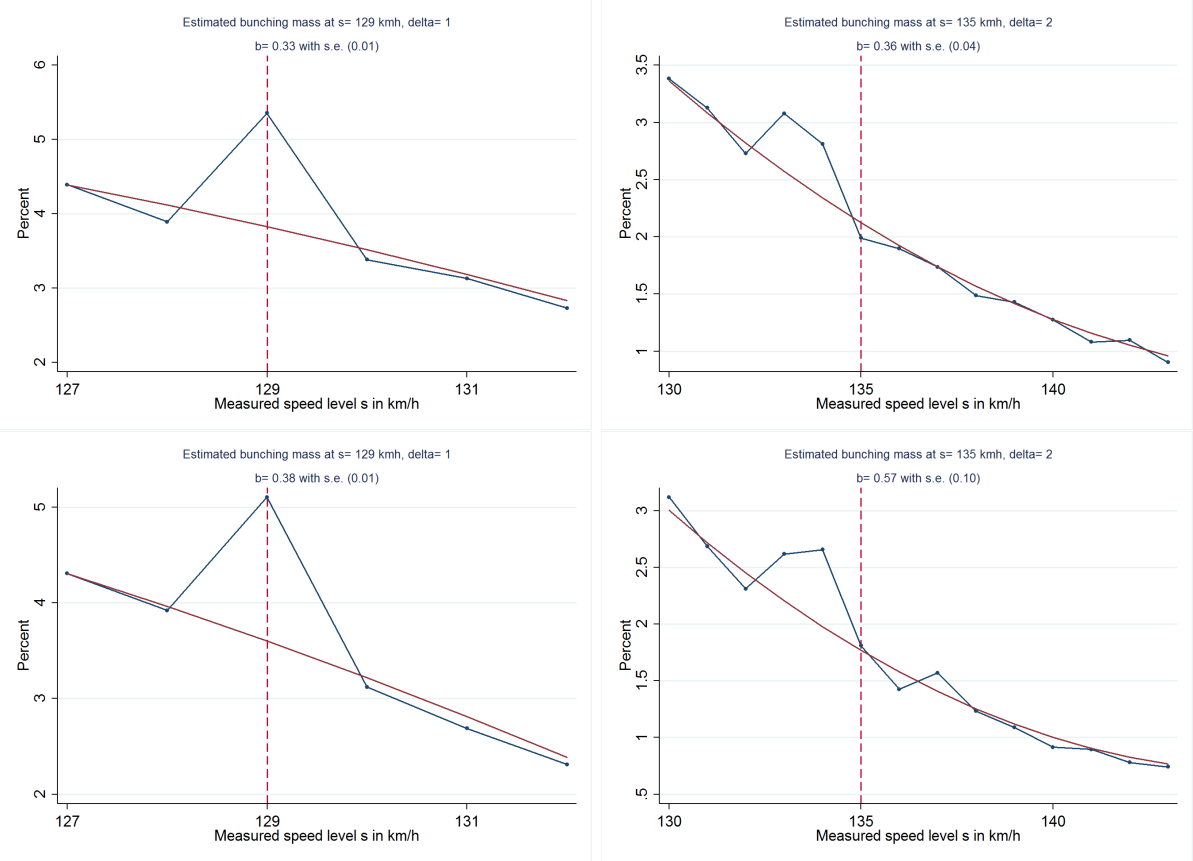
Note: The figure presents bunching estimates for the two cutoffs examined in the main sample. The two figures from the top [bottom] row are based on data from drivers with a local [non-local] number plate (relative to the location of the speed measurement; see footnote 19 in the paper).

Figure A.6: Bunching estimates for sample splits: Gender



Note: The figure presents bunching estimates for the two cutoffs examined in the main sample. The two figures from the top [bottom] row are based on data from female [male] drivers. Note that this sample split is only available for the subset of observations that contain information about the drivers' gender.

Figure A.7: Bunching estimates for sample splits: Weather



Note: The figure presents bunching estimates for the two cutoffs examined in the main sample. The two figures from the top [bottom] row are based on data from speed measurement sessions with good(sun) [bad(rain)] weather conditions.