

Unwilling, Unable or Uninformed to Cheat? Evidence on Tax Evasion and Information Spillovers in Austria

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SEEK 2014

Self-reporting, Information Spillovers and Tax Evasion

- Lab evidence suggests that taxpayers' reporting is sensitive to information obtained from others, with taxpayer-to-taxpayer communication generally lowering compliance when audit rates are unknown (see Alm et al. 2009)
- Field evidence on information spillovers regarding tax evasion opportunities is extremely scarce (exceptions are Rincke and Traxler 2011 and Pomeranz 2013 for enforcement spillovers)

The Austrian Commuter Tax Allowance

- Biggest standard deduction for employees in Austria

Table: Allowance as deductible from income (EUR per year):

Brackets	Public transport	
	Avail.	Not Avail.
2-20km	0	372
20-40km	696	1,476
40-60km	1,356	2,568
More than 60km	2,016	3,672

⇒ Brackets did not change since introduction, creating a constant discontinuity taxpayers can respond to

The Austrian Commuter Tax Allowance

- In any fiscal year, employees report their eligibility to the employer, which then adjusts taxable income before withholding
 - (Quasi) self-reported item since employers do not meet their responsibility to double-check the allowance claimed due to lack of knowledge and no automatic checking
- ⇒ Especially employees who live reasonably close to the bracket thresholds can overreport with very low risk of detection

Data Sources

- Payslip data from Austrian Ministry of Finance covering all wage earners and their standard deductions (1995-2005)
- Using a geographic information system (GIS) to calculate real driving distances between the centroids of each pair of zip-codes (employee & employer location)
- Austria has 2,208 zip-code areas, with a median surface area of 27km^2 and a median circumradius of approx. 3km.

The Extent of Cheating

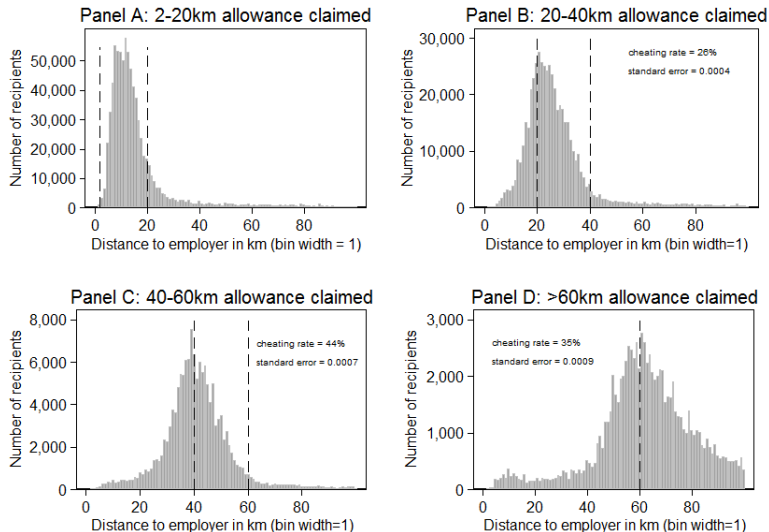


Figure: Allowance claimed and actual distance to employer (by bracket)

The Extent of Cheating

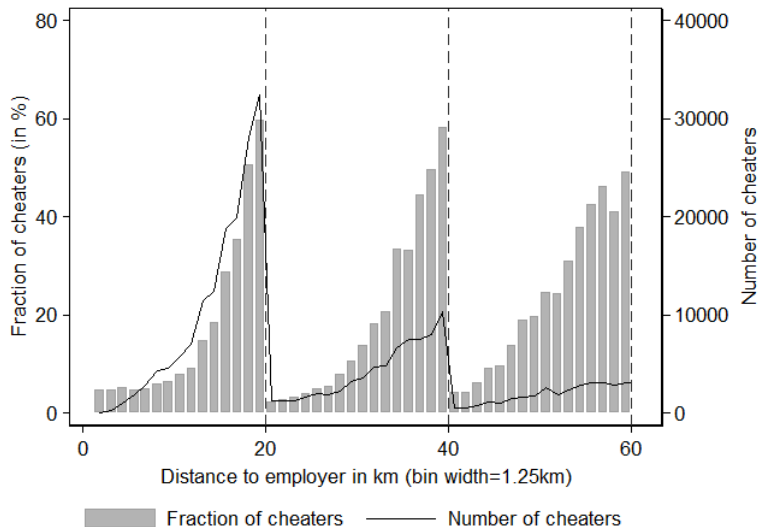


Figure: Reporting of commuters and bracket thresholds

Explaining Cheating in Commuter Allowances

Table: Estimation results (average marginal effects)

Variable	Pooled Probit	S.E.
Age	-0.002***	(0.000)
Female	-0.013***	(0.001)
Tertiary education	0.040***	(0.002)
White-collar worker	0.019***	(0.001)
Foreigner	0.001	(0.001)
Income (log)	0.025***	(0.001)
Distance tb < 2 km	0.534***	(0.001)
Distance tb \geq 2 and < 5 km	0.348***	(0.001)
Distance tb \geq 5 and < 10 km	0.142***	(0.001)
Firm size (> 10 employees)	0.003***	(0.001)
Informal sector	0.007***	(0.001)
Co-worker cheater share	0.274***	(0.001)
Pseudo- R^2	0.267	

Notes: 1,534,902 observations. *, ** and *** indicates significance at 10%-, 5%- and 1%-level. Region and year dummies included.

Identifying and Explaining Evasion Spillovers

- The correlation between individual compliance and the evasion behavior of co-workers could be due to social/moral norms within a workplace or information about the possibility of cheating
- ⇒ To establish a causal link between the co-worker cheating share and the individual compliance decision, we employ a subsample of job changers moving between companies (similar to Chetty et al. 2013)
- ⇒ To test for the information channel as the source of the evasion spillover, we derive testable predictions about the reporting behavior of job changers

Job Movers: Changes in Cheating Co-Workers

- Consider individuals who move across firms to isolate causal impact of co-workers' cheating on individual cheating decision
- Define co-worker cheating share as the degree of cheating among old and new colleagues at work
- Analyze how changes in co-worker cheating affect movers' reporting behavior

Movers Sample: Learning and Memory

Information model predicts asymmetric impact of job changes:

- Changing to a company with a higher share of cheating co-workers should increase cheating
- Changing to a lower-cheating company should not affect cheating behaviour

Impact of Changing to Firms with Lower vs. Higher Cheating Shares

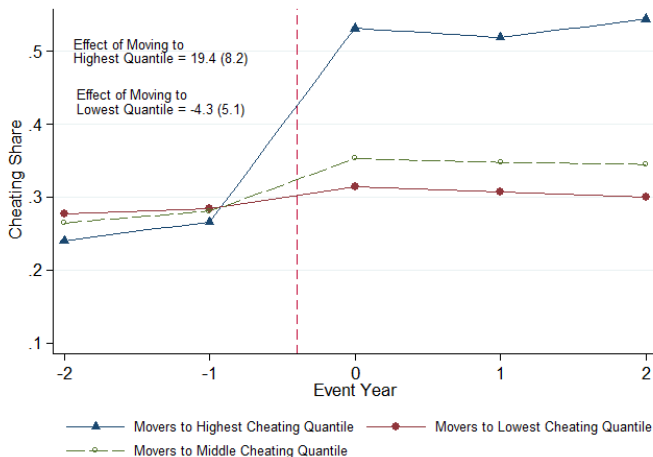


Figure: Event Study on the Effects of Changing to Firms with Lower vs. Higher Cheating Shares

Impact of Changing to Firms with Lower vs. Higher Cheating Shares

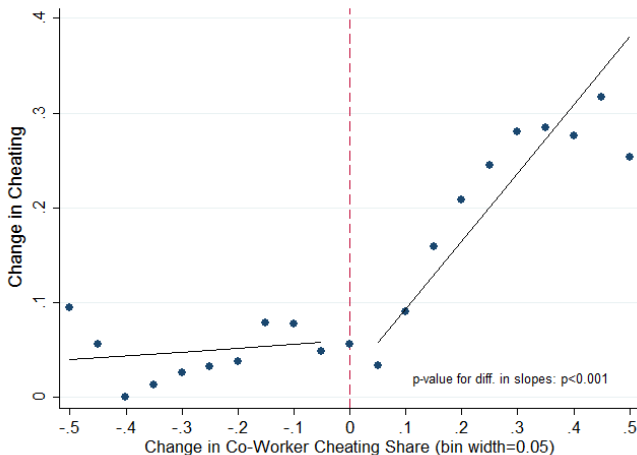


Figure: Asymmetric Effects of Increases vs. Decreases in Co-Worker Cheating Shares

The Tax Value of Information

Table: Change in allowance benefit with job change

Dependent variable: Change in allowance amount (in EUR)

	Without controls	Controls included
Increase of co-worker cheater share	943.93 (194.10)	1063.33 (215.83)
Decrease of co-worker cheater share	163.38 (104.42)	119.55 (124.25)
R^2	0.01	0.02
Observations	14,002	14,002

Notes: Column 2 includes controls for changes in income, firm size and distance to the next higher allowance bracket related with the job change.

Conclusion

- We show that cheating is substantial (30%), with sharp reactions of taxpayers to thresholds where the allowance discontinuously jumps to a higher amount
- We find spillover effects from cheating co-workers on the individual compliance decision
- When individuals are exposed to an environment of non-compliance, they are more likely to start cheating
- In contrast, moving to a more honest environment does not change cheating behaviour
- Results suggest that information spillovers regarding evasion opportunities are an important factor for the decision to evade

Policy Implications & Discussion

- Enhance enforcement by using an automatic checking system
- Information regarding tax policies diffuses slowly over time, and legislators as well as researchers have to be aware of this when evaluating the impact of a new legal act or reform
- Brackets inefficient, change compensation to linear function of distance (or introduce smaller brackets)?

Can Asymmetric Persistence of Norms Explain the Compliance Decision?

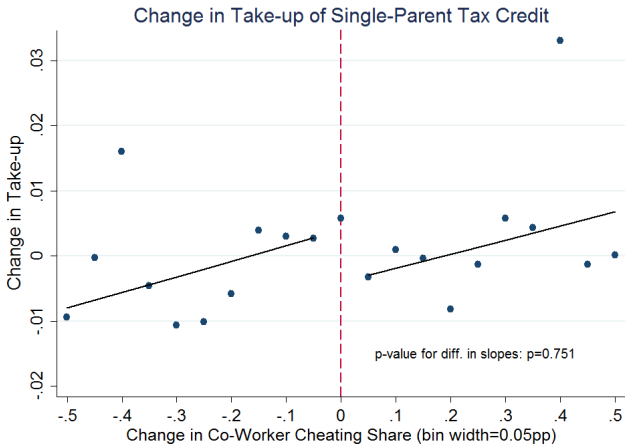


Figure: Impact of Changing to Firms with Lower vs. Higher (Commuter) Cheating Share on (Self-reported) Single Parent Tax Credit

Table: Characteristics of job-movers and firms in job mover sample

Variable	Low cheating (1)	High cheating (2)	p-value
<i>A. Characteristics of job movers</i>			
Age	38.32	38.06	0.433
Female (%)	28.23	25.02	0.045
Tertiary education (%)	1.71	2.45	0.143
White-collar worker (%)	53.57	58.72	0.004
Non-native worker (%)	13.70	12.39	0.284
Income before job move (Tsd. EUR)	28.46	32.22	0.000
Income after job move (Tsd. EUR)	30.57	35.16	0.000
Distance (km)	31.87	32.86	0.050
Distance to bracket (km)	4.85	4.99	0.282
<i>B. Firm characteristics</i>			
Age	36.61	36.36	0.189
Female (%)	16.74	13.63	0.015
Tertiary education (%)	0.53	0.63	0.665
White-collar worker (%)	37.75	41.22	0.049
Non-native worker (%)	4.14	3.59	0.271
Income level of firm (Tsd. EUR)	27.55	30.73	0.000
Income level of prev. firm (Tsd. EUR)	25.83	27.40	0.000
Distance (km)	23.66	21.81	0.015
Firmsize > 10 employees (%)	69.50	81.34	0.000
Informal sector (%)	10.22	8.38	0.144

Appendix

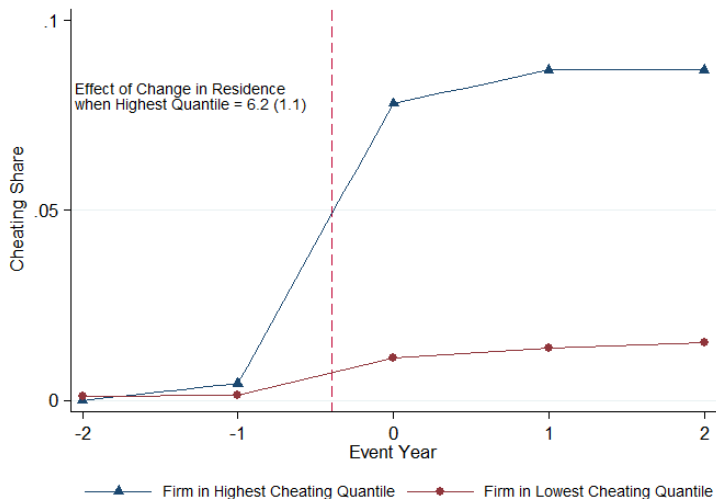


Figure: Effect of Changing Residence on Reporting Behavior when Working in High Cheating vs. Low Cheating Firms

Appendix

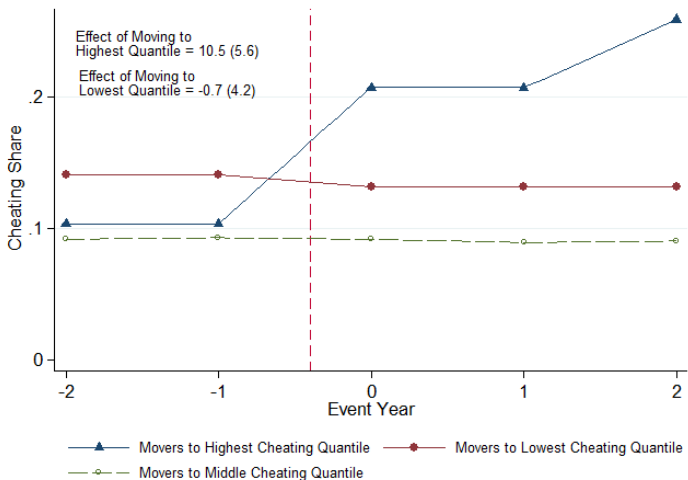


Figure: Impact of Changing to Firms with Lower vs. Higher Cheating Shares (constant Zip-Codes)

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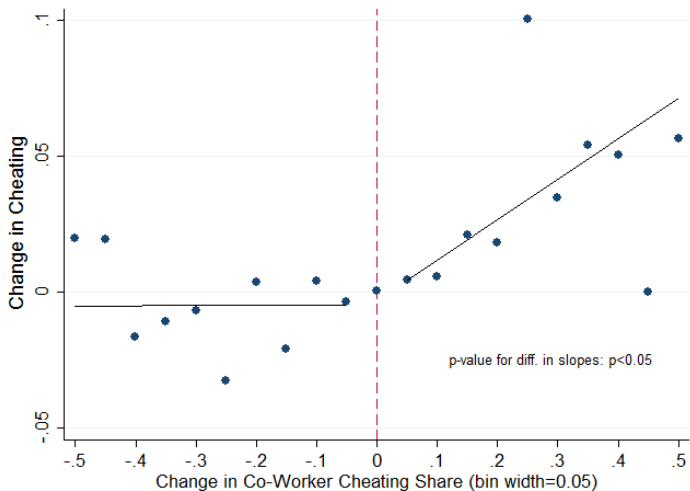


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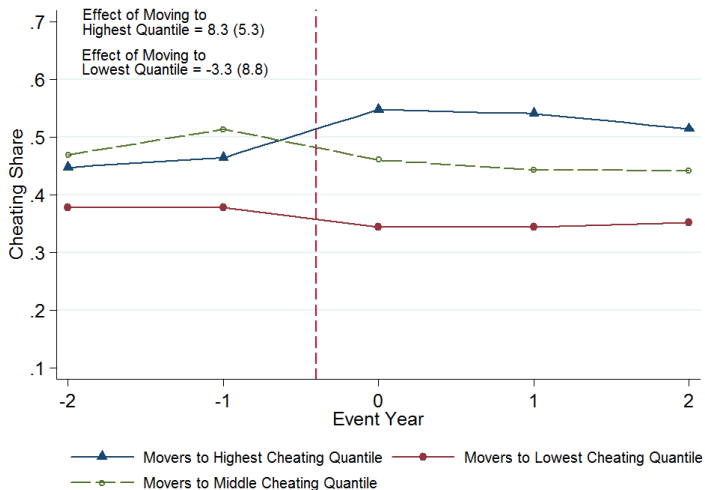


Figure: Event study of job changers coming from the highest quantile of cheating co-workers

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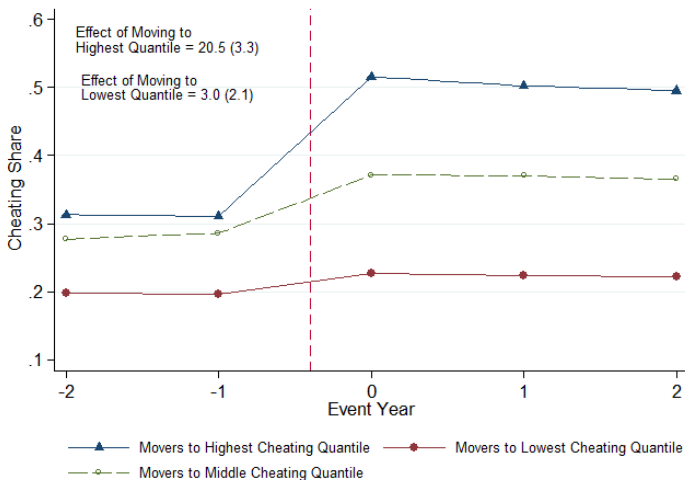


Figure: Event study of job changers coming from the lowest quantile of cheating co-workers

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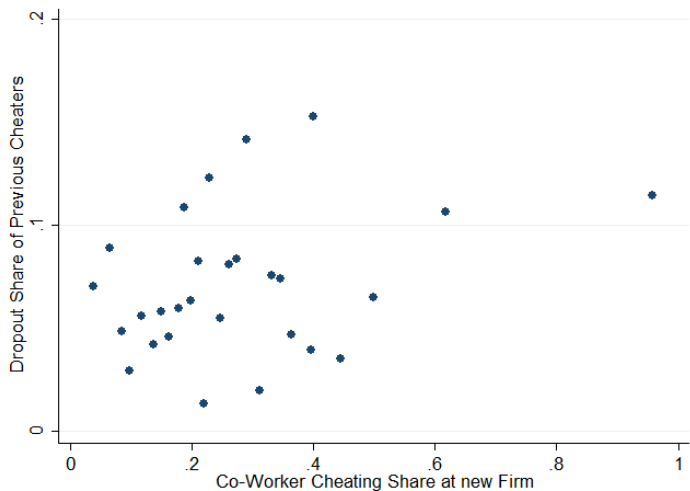


Figure: Dropouts from payslip filing after job change vs. co-worker cheating share at new firm

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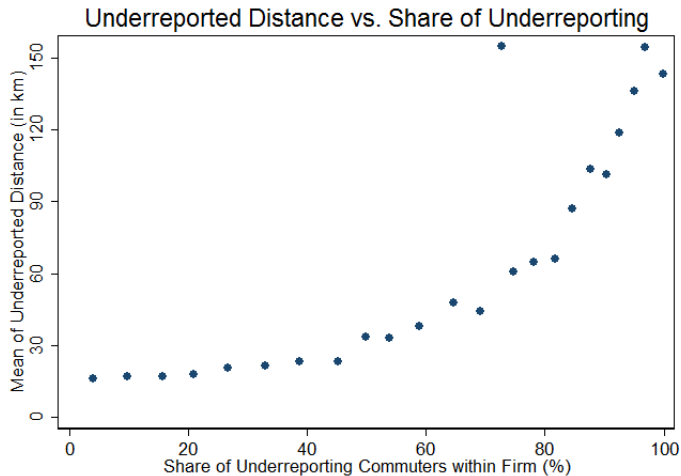


Figure: Underreporting as a Result of Single-Entry Enterprises

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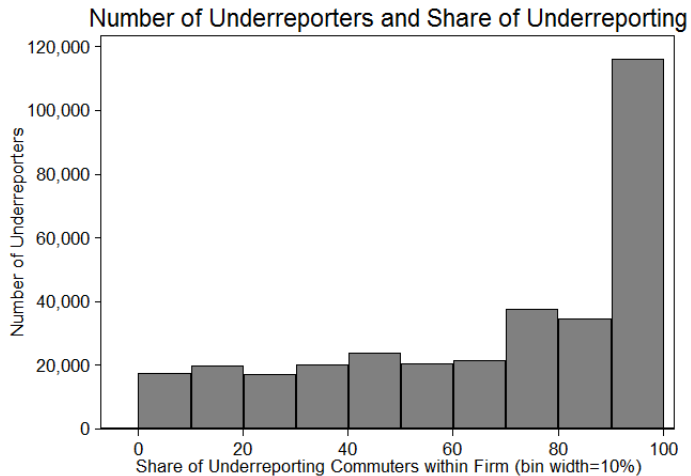


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