Experience with Punishment and Specific Deterrence: Evidence from Speeding Tickets

Libor Dušek and Christian Traxler^{*}

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Abstract

This paper analyzes how subjective experiences of being punished affect subsequent offending behavior. The context of our study is the enforcement of speeding tickets through speeding radars in a suburb of Prague. Using unique data that cover anonymized individual driving and ticketing histories of more than 170,000 car owners over 15 months, we evaluate drivers' responses to receiving a speeding ticket. In addition to evaluating the impact from the ticket, we ask whether the magnitude of any deterrent effect depends on the *delay* between the offense and the actual punishment. In answering these questions, we exploit high-frequency data and several quasi-experimental strategies that allow us to identify causal effects. We find evidence on a strong specific deterrence effect of receiving a ticket. Drivers reduce their speeding immediately after they receive the ticket and the reduction is sustained over several months. Moreover, we show that the effects are more than two times larger if the ticket is received within one month of the violation than with a longer delay. The results thus provide an original evidence on the role of celerity of punishment in specific deterrence.

JEL Classification: K14, K42, D80.

Keywords: Specific deterrence; Speeding; Punishment celerity; Re-offense rates; Regression Discontinuity Design.

^{*}Libor Dušek is Associate Professor at the University of Economics, Prague. E-mail: libor.dusek@vse.cz. Christian Traxler is Professor at the Hertie School of Governance, Berlin. Email: traxler@hertie-school.org. This research was funded by the IGA grant number F5/61/2014. We would like to thank Jiri Krejsa for research assistance. We greatly appreciate the cooperation with the town hall officials in making this research possible.