

## Drivers avoid tough penalties by staying under threshold

December 20 2017



Credit: University of Portsmouth

When faced with a 'stepped' penalty system for speeding, drivers who go over the limit tend to stay just below the threshold at which the penalty rises, according to new research.

The study of over 150,000 speeding tickets in Germany reveal that drivers' reaction to a notched penalty system – one that has stepped increases to the penalties the greater the misdemeanour – many drivers will stay just below the point where the penalty increases.

The research by Economists from the University of Portsmouth and two



German universities was carried out in Germany on the autobahn and also looked at 290,000 speed measures on single lane roads. It showed that disproportionately more drivers are speeding exactly at – or slightly below – certain cut-offs of the penalty scheme. The results could have implications for the UK, which changed its scheme in April this year.

Dr. Ansgar Wohlschlegel, from Economics and Finance, said that the German drivers in the study appeared to be reacting to the magnitude and pattern of the penalty scheme by deciding how much they're prepared to take a risk at being caught.

"The advantage of a stepped scheme like this is that it's easier for drivers to weigh up the best way to react to minimise the impact on them. Some drivers may decide that they will risk a <u>penalty</u> up to a certain point but not beyond it. It means having a good understanding of the penalties at each point in the scale, which we found most drivers had."

The UK has a similar stepped scheme. Speeding fines work in a three band system based on the severity of an offence e.g. 1-10mph over the speed limit, 11 to 20mph over and 21mph and above. Penalties correspond to the amount at which the driver was over the speed limit and drivers can be charged a percentage of their weekly wage. There is a cap of £1,000 on minor speeding offences or up to £2,500 for major ones.

"One million lives are lost worldwide each year due to <u>motor vehicle</u> <u>accidents</u> with speeding being a major contributor to the number of deaths, so the question is which schemes are the best way to encourage society to speed less? Stepwise schemes like those used in Germany and the UK do not reflect the extra harm done by speeding an additional mph in between the steps, but are more straightforward for drivers.

In countries like the Netherlands, drivers must pay an additional amount



of money – for instance, €10 – for each additional km/h they drive over the limit. You could argue that this better reflects the offence – so the punishment more accurately fits the crime. But it would only work if enough <u>drivers</u> understand it."

The research is published in the January issue of the *Journal of Public Economics*.

**More information:** Christian Traxler et al. Bunching on the Autobahn? Speeding responses to a 'notched' penalty scheme, *Journal of Public Economics* (2017). DOI: 10.1016/j.jpubeco.2017.11.006

## Provided by University of Portsmouth

Citation: Drivers avoid tough penalties by staying under threshold (2017, December 20) retrieved 27 April 2024 from <a href="https://phys.org/news/2017-12-drivers-tough-penalties-threshold.html">https://phys.org/news/2017-12-drivers-tough-penalties-threshold.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.