Study of auto recalls shows carmakers delay announcements until they 'hide in the herd'

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Automotive recalls are occurring at record levels, but seem to be announced after inexplicable delays. A research study of 48 years of auto recalls announced in the United States finds carmakers frequently

wait to make their announcements until after a competitor issues a recall—even if it is unrelated to similar defects.

This suggests that recall announcements may not be triggered solely by individual firms' product quality defect awareness or concern for the public interest, but may also be influenced by competitor recalls, a phenomenon that no prior research had investigated.

Researchers analyzed 3,117 auto recalls over a 48-year period—from 1966 to 2013—using a model to investigate recall clustering and categorized recalls as leading or following within a cluster. They found that 73 percent of recalls occurred in clusters that lasted 34 days and had 7.6 following recalls on average.

On average, a cluster formed after a 16-day gap in which no recalls were announced. They found 266 such clusters over the period studied.

"The implication is that auto firms are either consciously or unconsciously delaying recall announcements until they are able to hide in the herd," said George Ball, assistant professor of operations and decision technologies and Weimer Faculty Fellow at the Indiana University Kelley School of Business. "By doing this, they experience a significantly reduced stock penalty from their recall."

Ball is co-author of the study, "Hiding in the Herd: The Product Recall Clustering Phenomenon," recently published online in *Manufacturing and Service Operations Management*, along with faculty at the University of Illinois, the University of Notre Dame, the University of Minnesota and Michigan State University.

Researchers found as much as a 67 percent stock market penalty difference between leading recalls, which initiate the cluster, and following recalls, who follow recalls and hide in the herd to experience a

lower stock penalty.

This indicates a "meaningful financial incentive for auto firms to cluster following recalls behind a leading recall announcement," researchers said. "This stock market penalty difference dissipates over time within a cluster. Additionally, across clusters, the stock market penalty faced by the leading recall amplifies as the time since the last cluster increases."

The authors also found that firms with the highest quality reputation, in particular Toyota, triggered the most recall followers.

"Even though Toyota announces some of the fewest recalls, when they do announce a recall, 31 percent of their recalls trigger a cluster and leads to many other following recalls," Ball said. "This number is between 5 and 9 percent for all other firms. This means that firms are likely to hide in the herd when the leading recall is announced by a firm with a stellar quality reputation such as Toyota.

"A key recommendation of the study is for the National Highway Traffic Safety Administration (NHTSA) to require auto firms to report the specific defect awareness date for each recall, and to make this defect awareness date a searchable and publicly available data field in the auto recall dataset NHTSA provides online," Ball added. "This defect awareness date is required and made available by other federal regulators that oversee recalls in the U.S., such as the Food and Drug Administration. Making this defect awareness date a transparent, searchable and publicly available data field may discourage firms from hiding in the herd and prompt them to make more timely and transparent recall decisions."

More information: Ujjal K. Mukherjee et al, Hiding in the Herd: The Product Recall Clustering Phenomenon, *Manufacturing & Service Operations Management* (2021). DOI: 10.1287/msom.2020.0937

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