

The Effects of Privacy Regulation on the Supply of Stolen Data

Abstract

When individuals use the internet, they generate streams of data collected by many organizations including businesses, educational institutions, and data brokers. These organizations are constant targets of cyber criminals attempting to steal that data to sell it in online markets. In this paper I study the effects of the European Union's General Data Protection Regulation (GDPR), a policy governing the collection and storage of user data, on the quantity of data available in the illicit market. Using a difference-in-differences design, I find that the GDPR caused a 61 percent reduction in the number of data breaches advertised, but no reduction in the aggregate amount of data available. Analyzing the contents of the individual breaches, I find a nearly 70 percent increase in the amount of data they contain. These results suggest that, in response to changes in data collection and security practices caused by the GDPR, hackers shifted their efforts to larger, more data rich targets.