Abstract
Retailers regularly target users with online ads based on their web browsing activity, benefiting both the retailers, who can better reach potential customers, and content providers, who can increase ad revenue by displaying more effective ads. The effectiveness of such ads relies on third-party brokers that maintain detailed user information, prompting legislation such as do-not-track that would limit or ban the practice. We gauge the economic costs of such privacy policies by analyzing the anonymized web browsing histories of 14 million individuals. We find that only 3% of retail sessions are currently initiated by ads capable of incorporating third-party information, a number that holds across market segments, for online-only retailers, and under permissive click-attribution assumptions. Third-party capable advertising is shown by 12% of content providers, accounting for 32% of their page views; this reliance is concentrated in online publishing (e.g., news outlets) where the rate is 91%. We estimate that most of the top 10,000 content providers could generate comparable revenue by switching to a “freemium” model, in which loyal site visitors are charged $2 (or less) per month. We conclude that do-not-track legislation would impact, but not fundamentally fracture, the Internet economy.