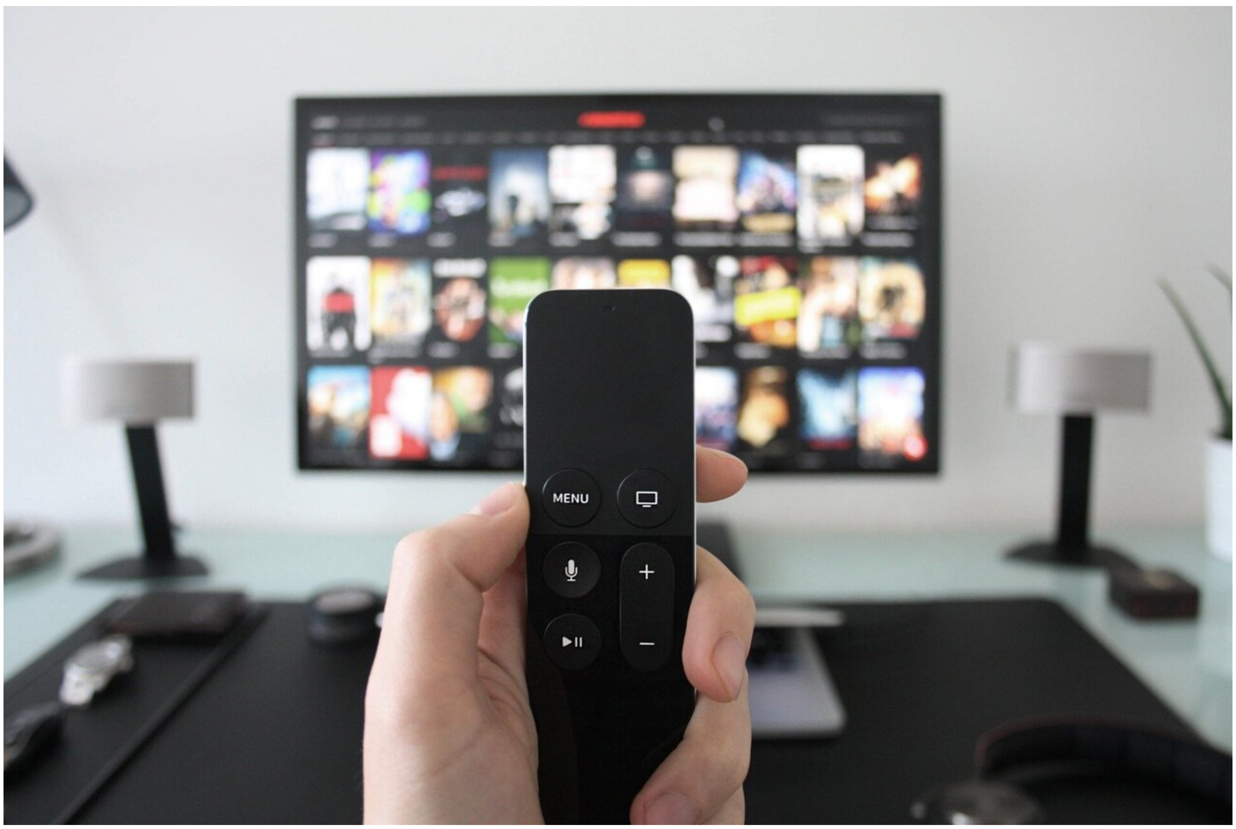
Why advertisers pay more to reach viewers who watch less

June 19 2024, by Deborah Lynn Blumberg



Credit: CC0 Public Domain

A new study finds that viewers' income and likelihood of buying a product are not the factors that determine how much it costs to reach them— it's how active they are on the platforms where the ads run.

Television advertisers consider men between 18 and 34 a coveted demographic—they'll spend as much as three times more to reach them than they will on women and older adults. Online, it's just the opposite. On platforms such as Instagram and TikTok, older audiences can be more expensive to reach.

These price discrepancies may seem puzzling. Young men's purchasing power is not any greater than that of older adults. Shouldn't digital advertisers go after the younger people who live online? Yet that's not how media ad prices are set: Viewers' income or likelihood of buying a product is not the biggest factor—it's how much time they spend viewing the content where the ads run.

More active audiences command a lower advertising price per impression, while groups that don't tune in as often cost a premium to advertise to, because they're simply harder to reach. So advertisers pay more to reach the young men who watch TV infrequently and the older viewers who stream fewer videos or shows.

That's one key takeaway from a recent paper by Stanford Graduate School of Business researchers Ali Yurukoglu, Matthew Gentzkow, and Frank Yang, Ph.D. The study is published in the journal *American Economic Review*.

"In this advertising market, it is not purely a demand story; it's a supply story," Yurukoglu says. "What's being sold are the eyeballs of the consumers. Data show that there are fewer young eyes on sale for TV because fewer young people watch TV. And older people are more scarce online."

The Stanford researchers and Jesse M. Shapiro of Harvard adapted an existing economic model of competition in advertising markets and tested it on advertising data. This model explains around 35% of the money that TV and online advertisers pay to reach people across different groups. The researchers believe they are the first to quantify the relationship between an outlet's ad pricing and how active various segments of its audience are.

"Since a huge part of the economy now is powered by advertising, it's really important to know how valuable—and why—different consumers are to advertisers, because that has a huge impact on what kinds of products and content are produced," says Gentzkow, a senior fellow at the Stanford Institute for Economic Policy Research(SIEPR).

It's this scarcity factor that helps to explain the price differences, he says. The researchers' model sheds light on why, for example, a 30-second televised spot during the 2024 Super Bowl cost advertisers $7 million. Companies paid this astronomical price because among the more than 100 million Super Bowl viewers were many people who rarely watch TV.

"Those are scarce eyeballs," Yurukoglu says, "and the Super Bowl is your way to reach them."

Watching the watchers

The scarcity factor also explains why broadcast and cable advertising revenue largely held steady from 2014 to 2019, even as more people moved over to streaming services. TV networks could charge higher prices to advertisers because they had fewer viewers. Ad prices were buoyed by competition for fewer eyeballs.

Yurukoglu and his colleagues used their economic model to estimate what would happen to ad prices on Netflix after its 2022 launch of a new service tier that carried advertising. The model predicted this move would lower the ad price per viewer for the five largest TV networks by approximately 1.5% as viewers began to see ads in more places. The researchers predicted that TV networks with audiences that significantly overlapped with Netflix's audience would see the biggest price declines in ads as companies' options for buying advertisements grew.

The researchers say their findings on the relationship between overlapping audiences and ad prices have implications for policymakers mulling over possible media company mergers. For example, if Station A and Station B have overlapping audiences, a merger of the two would likely push up the new station's ad prices, since companies purchasing ads would now face more competition to reach viewers with only one station now selling ads. Yurukoglu says that's a likelihood that should factor into regulators' decision-making when they weigh the pros and cons of potential media mergers.

However, the researchers also found that a scenario in which two TV stations with distinct audiences merge has different implications for policymakers. If Station A's viewers are primarily women, and B pulls mostly men, a merger of the two would be unlikely to boost ad prices since the overall number of distinct viewers would rise post-merger. More eyeballs on ads means a lower price, so in this case, ad prices would likely remain largely the same. When considering just the possible merger's impact on ad prices, combining Station A and Station B in this scenario would be okay.

"When it comes to antitrust questions and mergers, we usually think about how big companies are and about their market share," Gentzkow says. "But for advertising, it's key how their audiences overlap. Our findings do suggest that these types of economic analysis need to be done differently."

More information: Matthew Gentzkow et al, Pricing Power in Advertising Markets: Theory and Evidence, *American Economic Review* (2024). DOI: 10.1257/aer.20220943

Provided by Stanford University