

| Research | Roundup |
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| | May 2022 |

| DISCLAIMER : Not all authors are affiliated with TPI. We do not necessarily agree with everything, or even anything, in these papers, but find them interesting. | TPI's Research Roundup is our semi-regular compilation of recent outside research of interest to tech policy nerds. If you've read a paper you think might be interesting to include in the next Roundup, feel free to send it to nlovin@techpolicyinstitute.org. |
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| The Macroeconomic Impacts of Digitalization in Sub-Saharan Africa Felix F. Simione and Yiruo Li | Their question : How does internet penetration in Sub-Saharan Africa affect GDP growth and economic development? |
| | Their answer: They estimate that each percentage point increase in internet penetration increases real GDP growth by 0.37 percentage points. This study is unique because it uses the not-quite-natural experiment of the arrival of submarine cables to separately identify internet adoption. |
| | Why does it matter? The results suggest that increased attention to internet adoption in SSA may contribute to further economic development. |
| Media Slant is Contagious Philine Widmer, Sergio Galletta, Elliott Ash | Their question: Does change in local audience size of cable news affect other local media coverage? |
| | Their answer: The authors find that the slant of local newspapers changes with the share of local audience that views Fox News relative to CNN/MSNBC. |
| | Why does it matter? These results suggest that media coverage bias can change with popular demand for particular biases. |
| GDPR and the Lost Generation of Innovative Apps Rebecca JanSSen, et al | Their question: How did GDPR affect mobile app development? |
| | Their answer: GDPR caused about $1/3$ of apps to leave the Google Play Store while new app entry decreased by about half. |
| | Why does it matter? Platform regulation can have costs, and policymakers should take those into account when considering new rules. |
| The four-fifths rule is not disparate impact Elizabeth Anne Watkins, Michael McKenna, Jiahao Chen | Their question: Do AI computer scientists misinterpret the four-fifths bias rule? |
| | Their answer : The "four-fifths rule" holds that an AI is biased if the share of an unprivileged group that receives a positive outcome is less than 80% of the share of a privileged group that receives a positive outcome. The authors argue that the $\frac{4}{5}$ rule is too simplistic and misses important legal and contextual nuances, possibly resulting in biases that could otherwise be corrected. |
| | Why does it matter? This paper shows how experts in different fields need to work together to derive workable "rules of thumb" for identifying bias. |