TECHNOLOGY POLICY INSTITUTE

Research Roundup

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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.

The Corruptive Force of AI-generated Advice
Margarita Leib, Nils C. Köbis, Rainer Michael Rilke, Marloes Hagens, and Bernd Irlenbusch

Their question: How does AI-generated advice compare with human-generated advice?

Their answer: People are equally willing to lie for gain when an AI gives them dishonesty-promoting advice as they are when humans give them dishonesty-promoting advice. The results hold even when the participants knew if the advice was human or AI generated.

Why does it matter? As AI improves, it may become easier for malicious organizations to use it to generate advice that causes people to behave dishonestly.

Digital Resilience: How Work-From-Home Feasibility Affects Firm Performance
John (Jianqiu) Bai, Erik Brynjolfsson, Wang Jin, Sebastian Steffen, Chi Wan

Their question: How did a firm's pre-pandemic ability to work from home affect performance during the pandemic?

Their answer: As expected, firms better prepared to work from home did better during the pandemic. Surprisingly, the ability to WFH mattered more in non-high-tech industries. Firms that found themselves behind in WFH ability invested in software to catch up.

Why does it matter? The study shows how digital technologies can be important to firm resilience outside of the high-tech sector.

Can AI Replace the FTC?
Giovanna Massarotto & Ashwin Ittoo

Their question: Can AI improve the FTC's antitrust enforcement?

Their answer: Maybe! Machine learning algorithms may be able to identify patterns from previous antitrust cases that could be applied to current cases.

Why does it matter? AI can help improve government efficiency and effectiveness. Antitrust may be an area in which AI could be applied with less risk of introducing bias into the process.

The Causal Effect of Mobile Broadband on Earnings Inequality and Employment
Peter Wang

Their question: Does mobile broadband affect inequality and earnings?

Their answer: They find that increased mobile broadband coverage is associated with lower inequality. Specifically, a 10% increase in mobile broadband subscriptions is correlated with a decrease of 0.22 in the Gini Coefficient of earnings. A 1% increase in subscriptions leads to a 1.34% increase in county-level average earnings, and a 0.4% decrease in county unemployment. Ruggedness of the county's terrain is used as a instrument to establish causality.

Why does it matter? While the effects broadband in general is discussed frequently, mobile broadband is not looked as specifically as often and understanding the differences between fixed and mobile internet will become more relevant as 5G comes on line.