

Leveraging Computational Tools in Antitrust Enforcement

Teodora Groza, Sciences Po Law School



CODEX
The Stanford Center for Legal Informatics

Computational Antitrust



Let's reinvent the future of antitrust law together!



4th annual report

- 1. Breakthrough innovations**
- 2. Price tracking tools**
- 3. General applications**
- 4. Key challenges**

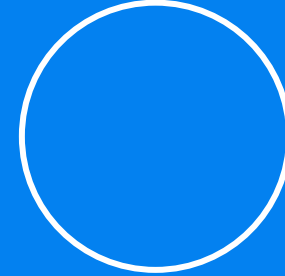
Breakthrough innovations



DIY antitrust compliance
toolkit
(Singapore)



reverse engineering of
ranking algorithms
(Italy)



neuroscience experiments
for dark patterns (Poland)

Price tracking tools

- interrupted time series model to process price / volume data taking the monthly effect of prices into consideration and assessing their economic reasonableness (Taiwan)
- regional price dashboard tracking prices of essential commodities and detecting structural breaks in pricing data (Pakistan)
- tool to scrap price data from the websites of supermarkets + airline companies for domestic flights with hand luggage (Colombia)

General applications (I)

- supervised ML tool trained on previous cases that recognizes complex patterns of suspicious behaviours (Spain)
- AI enhanced document review platform capable of contextual, emotional, and behavioral analysis + detecting different types of cartels (Lithuania)
- a merger decision chatbot to help agency staff access institutional knowledge (Singapore)
- an LLM answering questions based on the internal data of the agency (France)

General applications (II)

- virtual data rooms to provide access to case files (Hungary)
- AI assistants for document management (Luxembourg)
- workflow management tools (Malawi, Malaysia)

Challenges

Human-machine
interactions

AI explainability

Recruiting / retaining staff