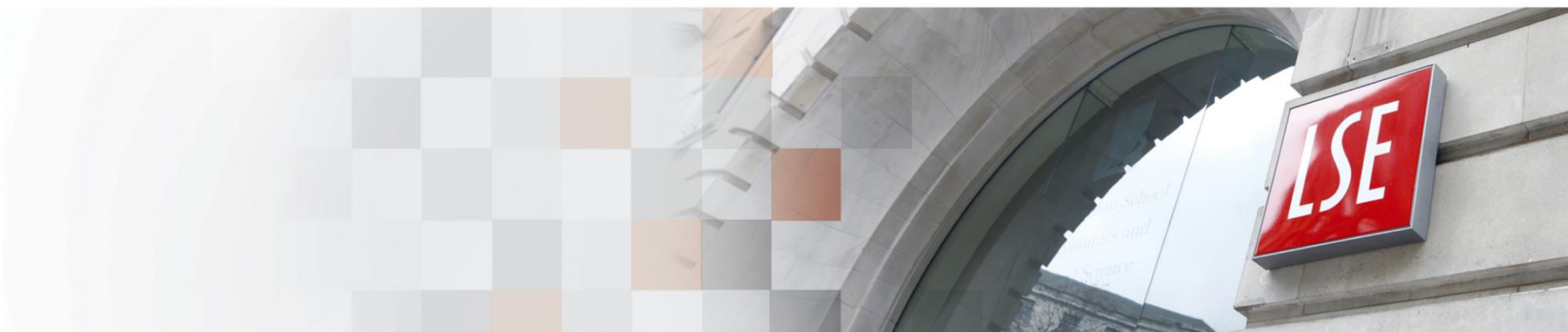


Competition in the Era of Algorithms: Evolving Law & Policy

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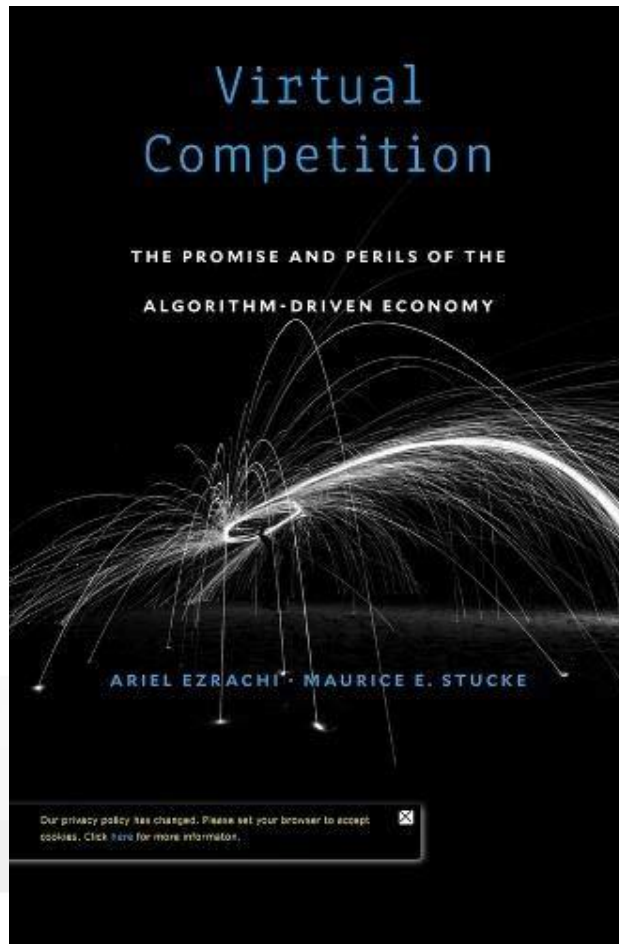


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How does EU competition law address the increasing use of algorithms in modern markets?

1. Robot Cartels?
2. Algorithms as a Mere Fact of the Market
3. Algorithms as Aggravators of Harm
4. Algorithms as 'Normal Competition on the Merits'
 - *Beyond competition law: options for reform*

I. The 'Dystopian' Scenario: *Robot Cartels*



- *Trod/GB eye cartel (UK)/US v Topkins (US)*
 - Cartels conducted by *deliberately* programming price-setting algorithms to collude
- Calvano et al., 'Artificial Intelligence, Algorithmic Pricing and Collusion' (2019)
 - Lab experiment: price-setting algorithms can engage in tacit collusion spontaneously
- BUT...no real-world cases *yet!*

II. Algorithms as a Mere Fact of the Market: *Online Advertising*



- *Guess* (2018)
 - ‘By object’ breach of Art.101 TFEU for clothing manufacturer to prohibit authorised retailers from bidding on keywords in AdWords
- *Google Search (AdSense)* (2019)
 - Exclusive dealing contrary to Art.102 TFEU for Google to require online publishers to reserve most profitable space in search results pages for Google ads



Google Ads



Google AdSense

II. Algorithms as a Mere Fact of the Market: *Online Advertising*



- In both cases, behaviour at issue only made sense as anticompetitive strategy because of how underlying algorithm operated
 - *Guess*: defendant wanted to lower its online advertising costs by reducing price of keywords due to lower competition
 - *Google (AdSense)*: readers more likely to click on higher-placed ads
- ***BUT***, while algorithm presented distinct market feature to be manipulated here, it was not dispositive of abuse
 - Crucially, same abuse could easily have arisen in brick-and-mortar context

III. Algorithms as Aggravators of Harm: *Resale Price Maintenance*



- Resale price maintenance (vertical price-fixing) in the EU: *some context*:
 - RPM 'by object' restriction of Art.101 since 1980s (*Binon, Pronuptia*)
 - Increasing recognition of more ambiguous nature of vertical restraints (*Leegin* in US; *Maxima Latvija & Coty* in EU)
 - Since decentralisation of enforcement in 2004, Commission largely left vertical cases to national competition authorities
- *BUT*, in 2018, Commission took five infringement decisions against RPM practices in online sphere (*Asus, Denon & Marantz, Philips, Pioneer, Guess*) – as 'by object' restrictions!

III. Algorithms as Aggravators of Harm: *Resale Price Maintenance*



- What explains this application of older (arguably dubious) precedent in digital context? = widespread use of pricing algorithms!
 - By **manufacturers**, to scrutinise pricing practices of retailers and enable detection of lower prices rapidly and systematically.
 - By **online retailers**, to track prices charged by competitors and adjust prices downwards to match lowest available online—‘cheating’ leads to widescale ‘online price erosion,’ so successful enforcement of RPM policy achieves across-the-board price increase
- Here, use of price-tracking and price-setting algorithms has effect of reinforcing efficacy of RPM online – making it more harmful in practice, so tipping balance in favour of enforcement

IV. Algorithms as 'Competition on the Merits': *Self-Preferencing*

➤ *Google Search (Shopping) 2017*






- Infringement of Art.102 leading to then-recording-breaking €2.4 billion fine

Google

All Shopping Images News Maps More Settings Tools

About 5,780,000,000 results (0.62 seconds)

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IV. Algorithms as ‘Competition on the Merits’: *Self-Preferencing*



- **Self-preferencing:** ‘giving preferential treatment to one’s own products or services when they are in competition with products and services provided by other entities using the platform.’ (*Competition Policy for the Digital Era*, 2019)
- In *Shopping*, Google’s general search algorithm set parameters of ‘normal’ competition on the merits
 - So deliberate efforts to disrupt ‘organic’ operation of search engine (downgrading rivals, promoting its own service) viewed with scepticism
 - If G’s search engine is of such superior quality, why depart from it, if not for exclusionary purpose?
- Unlike dystopia of ‘robot cartels,’ algorithms can make markets *more* competitive, where they operate independently and objectively

Some Overarching Observations on Competition Law & Algorithms



- Algorithms ‘part of the furniture’ in modern markets – so proper understanding of how competition works requires understanding role of algorithms
 - May be complex task for ‘black box’ algorithms
 - But for competition law, precise operation of technology is less important than actual/anticipated impact on competition
- Starting point: undertakings should not deliberately interfere with free-functioning of algorithms in manner likely to have anticompetitive effects
 - By interfering with algorithm itself (*Shopping*) or its inputs (*Guess*)
- *BUT* competition law should not defer to inherently anticompetitive technology (e.g. robot cartels, algorithms reinforcing harm)

Beyond Competition Law: Options for Additional Regulation (I)



- **Regulation 2019/1150 on promoting fairness and transparency for business users of online intermediation services (OJ L 186/57, 11.7.2019)**
 - Imposes obligations on providers of online intermediation services in respect of interactions with business users
 - Focus on terms and conditions offered, e.g. clarity of ranking criteria within algorithms, differentiated treatment, mandated access to data, and restrictions on terminating service
 - Applies to all service-providers (i.e. no dominance requirement), but weak enforcement framework (essentially form of co-regulation)

Beyond Competition Law: Options for Additional Regulation (II)



- **Ex ante Code of Conduct** for large digital undertakings
e.g. Digital Services Act package (EU), *Unlocking Digital Competition* (UK), *ACCC Digital Platforms Inquiry* (Australia)
 - EU proposal targeted at ‘the economic power that large online platforms acting as gatekeepers hold’ (note: not market power)
 - Heightened scrutiny of/*ex ante* obligations for Big Tech firms, with dedicated enforcer at EU-level
 - Could, *inter alia*, curtail use of algorithms or dictate how these are developed in future
 - Query: is a public enforcer best placed to determine this?

Beyond Competition Law: Options for Additional Regulation (III)



- Need for a '**New Competition Tool**' to fill the gaps within existing competition law framework?
 - Currently being considered by EU Commission
 - Proposal resembles UK market investigation regime, which enables CMA to conduct in-depth review of markets 'not working well' to determine if any feature generates 'adverse effects on competition'; extensive remedial powers (including structural separation)
 - Again, could be applied to limit or direct use of algorithms by Big Tech firms
 - A (tentative) objection: do current 'gaps' in competition regime potentially exist for good reasons?!