



ALGORITHMS AND THE NEED FOR INTERVENTION - AN ECONOMIC ASSESSMENT

Prof. Achim Wambach, Ph.D.

CIPCO Online Workshop

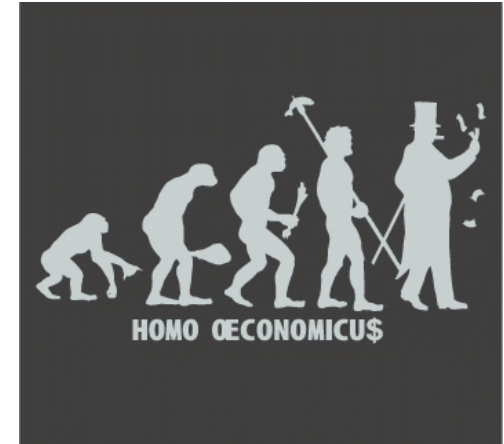
Algorithmic Market Activity - A Challenge for Competition Policy

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Homo oeconomicus – the ideal AI-system

Homo oeconomicus

- Maximizes target variable (utility/ profit)
- Takes all available information into account
- Decides rationally



Homo oeconomicus in action: Tacit collusion

- It is conceivable *(Calvano et al., 2020)*
- It can be observed *(Assad et al., 2020)*

- How relevant will it become?
 - Retail gasoline market as ideal example
 - Homogeneous product
 - Transparent prices & quick turnaround

- What can be done? *(Monopolies Commission, 2018, Chapter I)*
 - Strengthen market monitoring
 - Authorize consumer associations to initiate sector inquiries

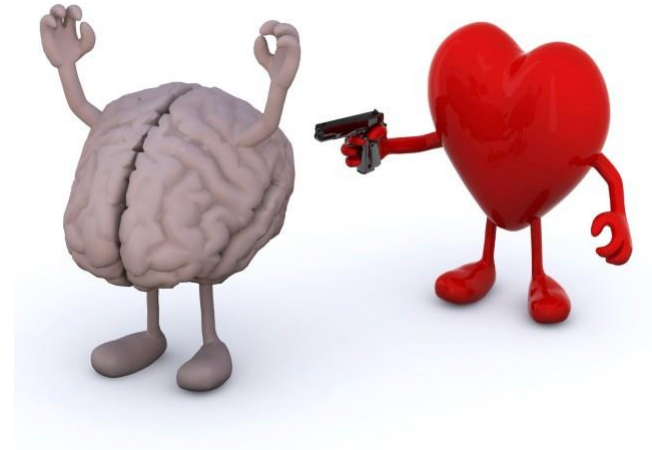
Consumer without AI – Homo heuristicus

Rational consumer

- Typically price discrimination
increases competition

Biased consumer

- We have a problem ...



Price discrimination, competition, and biased consumers

“Classical” IO – no price discrimination

- Sophisticated consumers protect biased consumers

Behavioral IO – second degree price discrimination

- Sophisticated consumers profit from biased consumers
 - Contingent charges, e.g. overdraft fees (*Armstrong & Vickers, 2012*)
 - Roaming charges (*Heidhues & Köszegi, 2016*)

Behavioral IO – first/third degree price discrimination

- Policy attuned to the biased consumer
 - Competitive pressure leads to optimal (distorted) offer given bias

What needs to be done?

1. Can the market solve the problem? If not, why not?
 - E.g. price comparison sites
2. Can/will the individual learn to overcome the bias?
 - Learning by doing
 - Information by authorities
3. Intervention by competition agencies
 - Strengthen market monitoring (frequency & capabilities)
 - Potential regulation
 - Disclosure requirements to improve consumer information
 - Industry standards & guidance regarding data ethics

Thank you for your attention