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Reconciling Ex-Ante and Ex-Post Regulation - The Concept of Vulnerable Markets With an Application to Online Food Platforms

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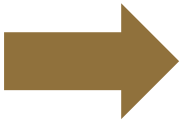
Agenda

1	Welfare gains from digitalization
2	Platforms – economic characteristics
3	Competition concerns
4	Regulatory responses – ex ante vs. ex post
5	Vulnerable markets assessment

Welfare gains – for example Google Android, I

In the summer of 2005, Google acquired a start-up Android Inc. for an estimated 50 million USD:

- Google recognized that mobiles are "**the next frontier in search**" and that there was potential in developing smarter and better mobile devices
- Google acquired Android because of the "**talented engineers and great technology**"
- Android **did not have any commercial products** at the time acquisition
  - Android 1.0, the first commercial version of the software, was released on September 23, 2008

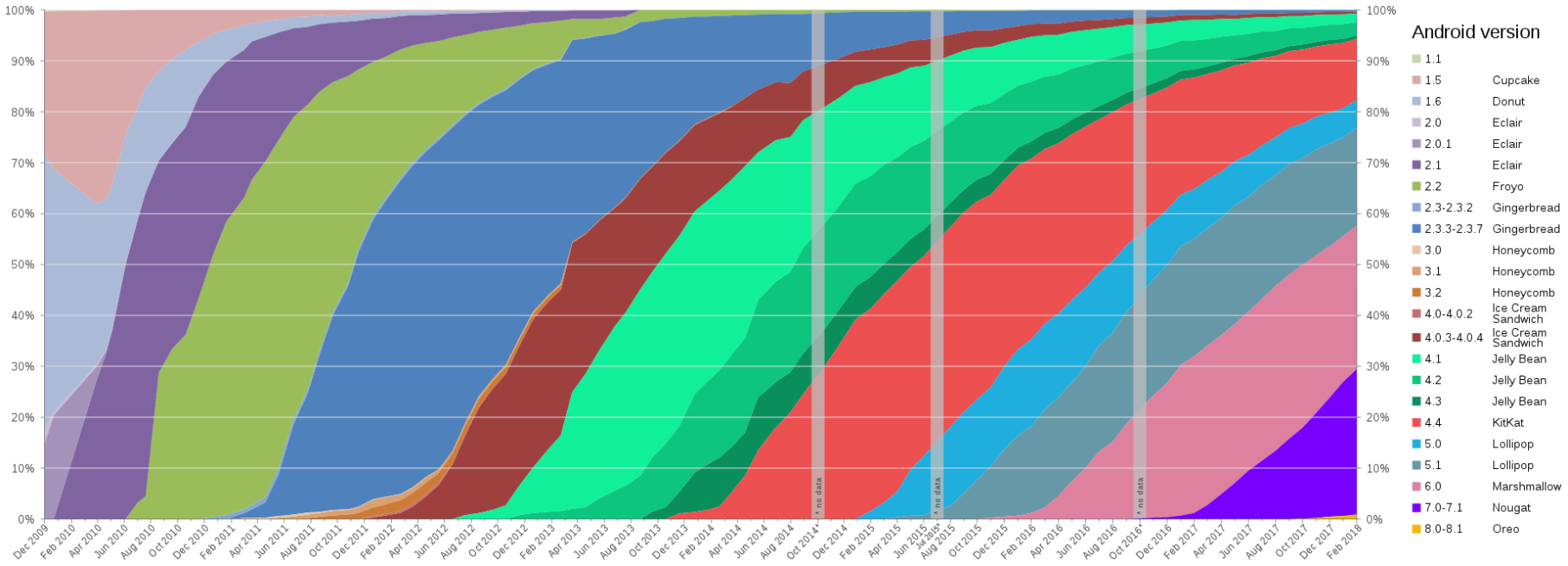


With regard to Android, Google has discovered a market niche and launched a successful product in the market, but also with the aim of enabling searches on mobile devices.

For comparison, "Google did not invent comparison shopping" (Google Shopping, 2017, para 343)

The introduction of the transaction value threshold (€400 million) would not have been effective for this acquisition.

Global Android version distribution since December 2009



Google continues to innovate, regularly releasing new and improved version of the operating system

For example, "Google introduces a streaming service for video games called Stadia. The games should not run as usual on the users' devices, but on powerful Google servers, and be transmitted via the Internet. Google is bringing its own controller onto the market for control purposes. In the future, the company also wants to develop its own video games."
Süddeutsche 19.3.2019

Source: Wikipedia

Welfare gains - white paper on digital platforms

According to the German white paper on digital platforms:*

- Within the EU, a single digital market could **add €415 billion** per year to economic output
- In Germany alone digitalization of the industry could **deliver €425 billion** value added cumulatively
  - Efficiency is expected to increas in the production and provision of goods and services of up to 30% overall and about 3% annually
  - Improved cooperation between companies and start-ups could open up potential growth of up to €100 billion by 2020

More generally

- Former regional markets become integrated
- Availability of a wide range of products

*Bundesministerium für Wirtschaft und Energie (2017), "White paper digital platforms – Digital regulatory policy for growth, innovation, competition and participation", available online at https://www.bmwi.de/Redaktion/EN/Publikationen/white-paper.pdf?__blob=publicationFile&v=2

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Economic properties of platforms

- **Multi-sided platforms**
  - Prices from zero (or even negative) on a market side
  - (Indirect) network effects, and cross-product data accumulation
  - Different forms of competition on the market sites, in particular online advertising compared to the users
  - Weak substitutes and complementarities

- **Tipping and „winner-takes-most“**
  - Organic growth strategy
  - Driven by cheap money in financial markets
  - Importance of **multi-homing** and switching costs
  - Behavioural biases (saliency bias, status quo/ default bias, inertia)

- **No physical capacity restrictions**
  - Entry barriers due to data, technology and network effects

- **Transparency**
  - Horizontal and vertical issues

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Overview of competition concerns regarding platforms

- General concern of **monopolisation**
  - Facilitating **tipping** of markets
    - Using contractual restraints; building of walled gardens
    - Artificially strengthening economies of scale and scope
      - by restraining multi-homing
      - or creating data walls
  - **Conglomerate strategies** of controlling weak substitutes
    - To exclude potential competitors
    - To build non-replicable data blocks
- **After successful tipping** of a market
  - Obstruction of market entry
  - Purchase of smaller suppliers

Examples:

- Eventim
- Google AdSense, (but also: Reuters)
- Spotify

Examples:

- Facebook WhatsApp
- Facebook Instagram

Overview of competition concerns regarding platforms

- Asymmetric information results in **exploitation of customers**
  - Non-neutrality of price search engines
  - Individualized pricing and advertisement targeting
  - Extensive extraction of data

Examples:

- Facebook
- Various sector studies in DE, FR

- **Increasing transparency** may result in
  - Horizontal collusion (through monitoring; through algorithmic pricing)
  - Vertical exclusion
    - preferential treatment of own services
    - double role of integrated retailer and open market place

Examples:

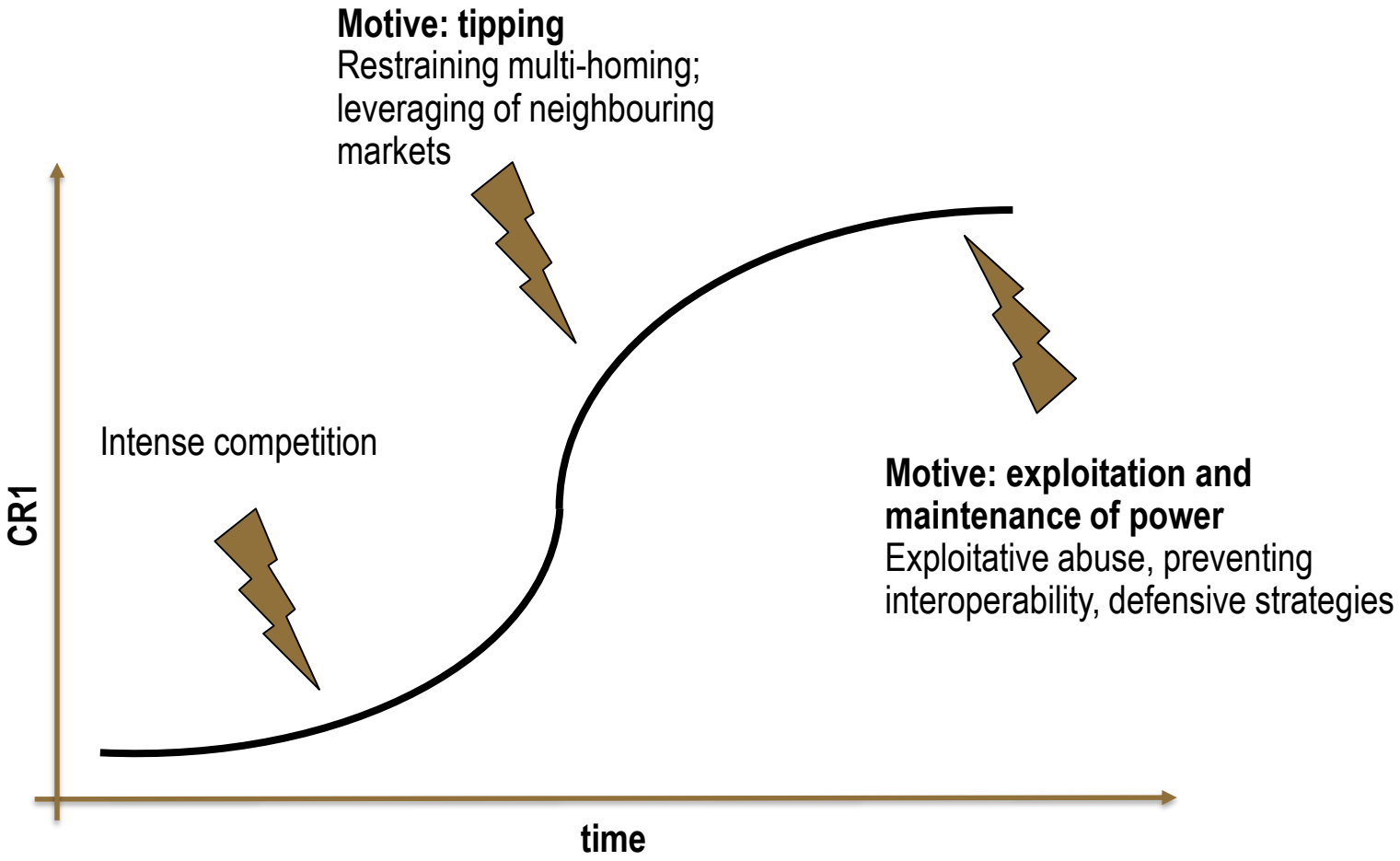
- UK Poster & frames case (Trod Ltd/GB eye Ltd, 2016)
- Google Search
- Amazon

Most concerns relate to **P2C**, only recently P2B has come into focus

Examples:

- Steel and cement trading platforms

Market development and theories of harm



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Advantages and disadvantages

Ex-ante regulation

Advantages

- Direct control of behaviour
- Sector specific knowledge/ specialised regulator
- Resources
- Well structured; procedural certainty

Disadvantages

- Typically used as an instrument of liberalisation
- Often national in scope
- Slow/ static
- Political capture

Ex-post regulation

Advantages

- Works also via deterrence
- Independency of Competition Authority
- Global impact
- (speed)

Disadvantages

- Typically only after complaints
- Mergers: forward-looking, therefore rather speculative in new markets
- Abuse of dominance: Finding of dominance difficult in innovative markets

Regulatory responses – ex ante vs. ex post

- **First reform wave focused more on competition law, probably also because regulation seems too cumbersome an instrument**
  - Merger control: Transaction value threshold, antitrust markets despite zero price, indirect network effects
  - Regulatory proposals related to data portability and consumer protection, i.e. GDPR
  - Case precedents and advocacy

- **Second reform wave proposes more drastic changes to competition law and regulation**
  - Lowering dominance threshold; extension of the definition of bilateral dependency
  - Assessment of special market power based on intermediary position/ strategic position/ bottleneck power
  - Code of conduct for firms with strategic market status
  - Strengthening of specific categories of abuse, in particular multi-homing or denial of data access
  - Governance rules for marketplaces
  - Reversed presumptions regarding killer mergers, error cost/ balancing of harm approach

Until recently proposals focused more on competition law, probably also because regulation seemed too cumbersome as an instrument. This has changed most recently, with calls for a digital regulator becoming louder

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4	Answers – ex ante vs. ex post regulation
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Vulnerable markets

Markets which are prone to artificial tipping may require special treatment

"First, markets with strong positive network effects may tend to "tip", i.e. to turn into monopoly. […]. Under existing competition law, such unilateral behaviour can be addressed only if the respective undertaking possesses a degree of market power that is relevant under competition law (i.e. a dominant position under Article 102 TFEU / § § 18, 19 GWB, or relative or superior market power under § 20 GWB). ***In markets prone to "tipping", an intervention below that threshold may be desirable as a matter of competition policy.*** *The main justification for lowering the intervention threshold would be that "tipping" – once it has occurred – can hardly be reversed. We therefore recommend to insert a new § 20a or § 20 para. 6 GWB, which prohibits platform operators in tight oligopolies, or platform operators with superior market power, to obstruct multi-homing or the changing of platforms, insofar as this strategic obstruction is suitable to promote a "tipping" of the market." (Schweitzer et al. 2018, p.3)*

Potentially large **error costs** because of incumbency effects, i.e. tipping

“err on the side of disallowing types of conduct that are potentially anti-competitive, and to impose the burden of proof for showing pro-competitiveness on the incumbent. This may be even more true where platforms display a tendency to expand their dominant positions in ever more neighbouring markets, growing into digital ecosystems which become ever more difficult to leave.” EC Report “Competition Policy for the Digital Era“, p.51

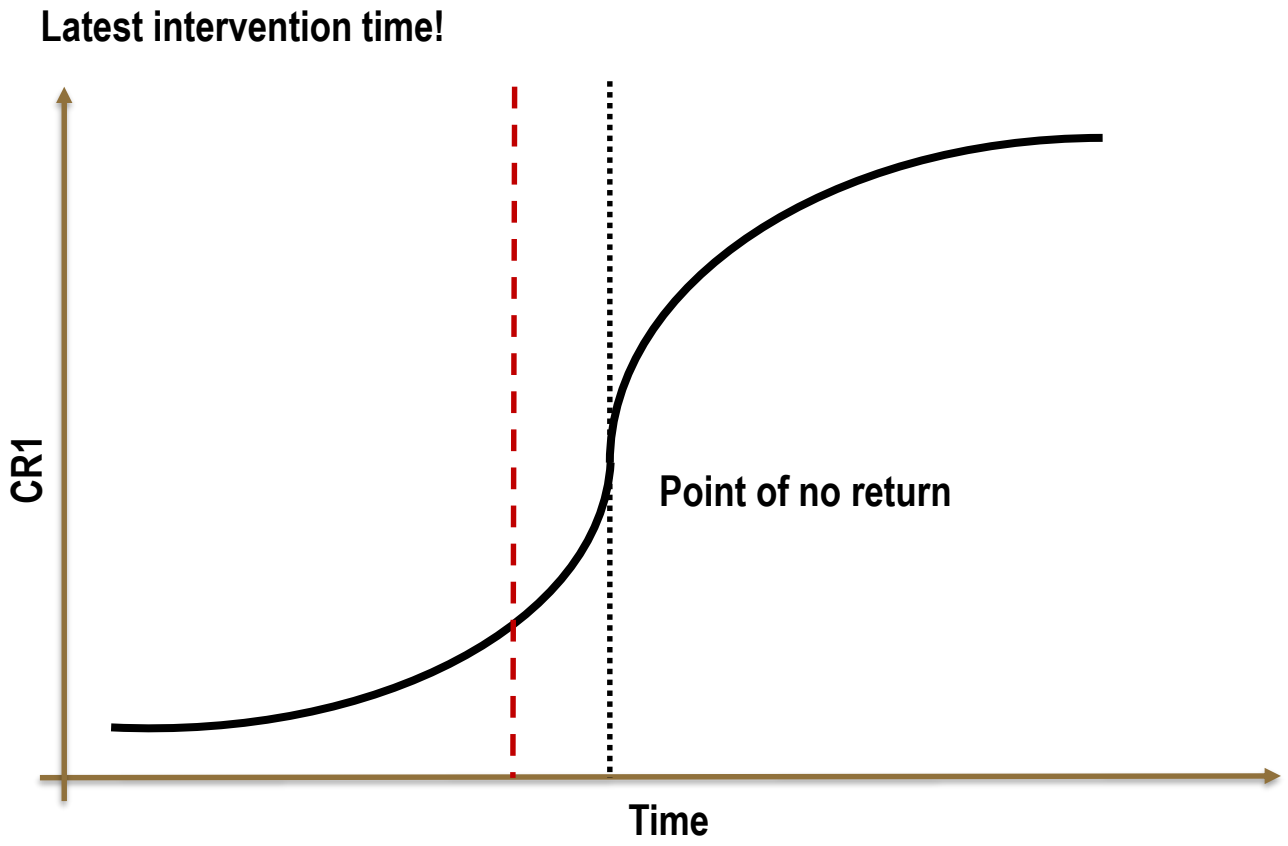
Vulnerable markets

Focus on companies with "strategic market status"

- Identification of companies with strategic market significance: (*"those in a position to exercise market power over a gateway or bottleneck in a digital market*" ("Furman report, Digital Competition Expert Panel", GB, RN 2.10))
- Regulatory approach via code of conduct

While details differ and are unclear (Enforcement under competition law? By a dedicated regulator? Dominant firm or market perspective?) they all rely on identifying markets prone for tipping

Empirical problem: ex ante assessment of a highly idiosyncratic event with alternative explanations being available!

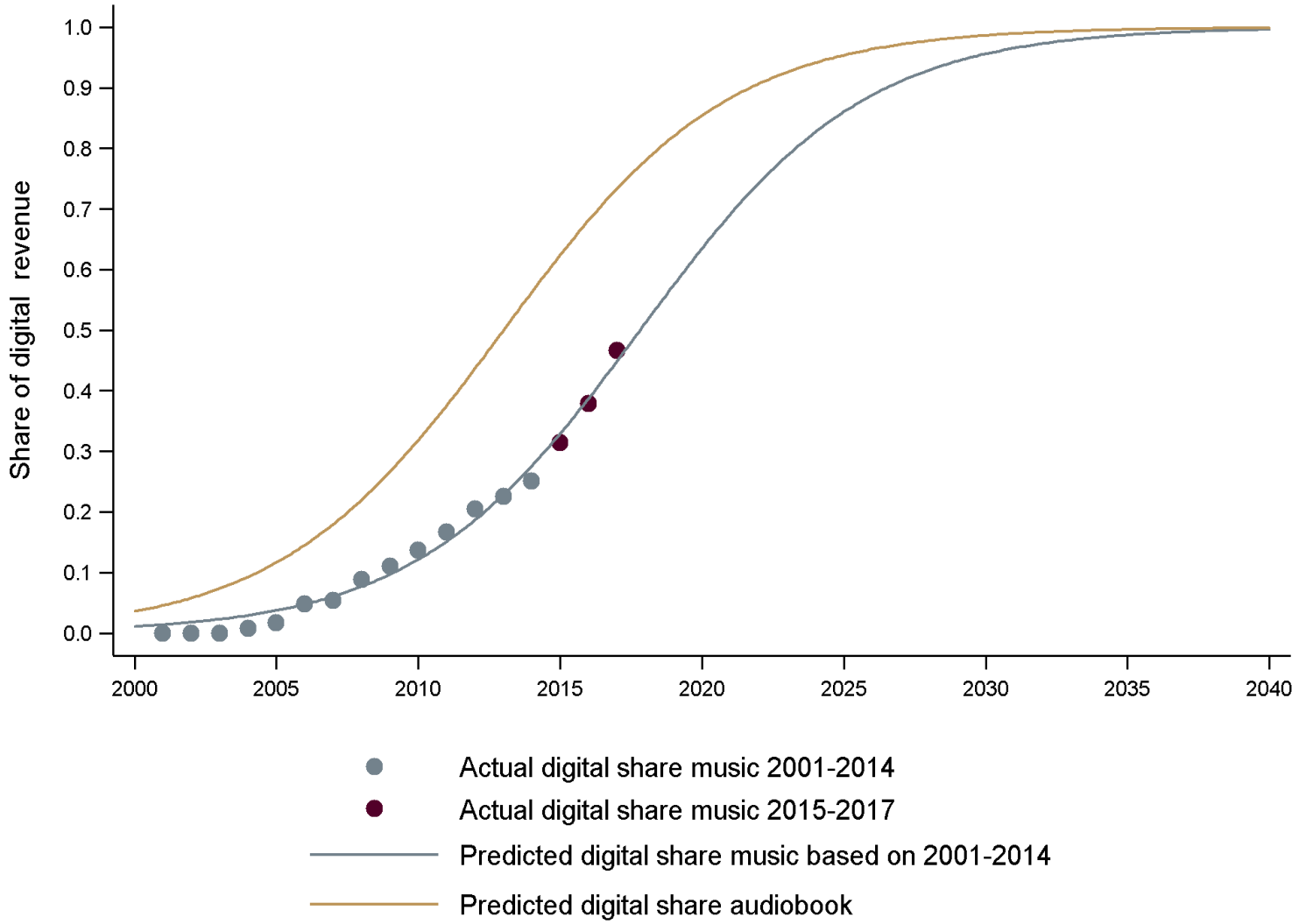


How can one recognize a market as vulnerable? Scarcity of empirical work, an academic view

- **Tipping has often been discussed, but empirical evidence scarce**
- It would be helpful to systematically assess which markets have and have not (yet) been tipped
  - Google and general search
  - Mobility services, travel
- See also ex-post assessment of merger control, e.g. Lear Report
- **General framework to measure tipping (Dubé, Hitsch and Chintagunta, 2010)**
  - Measure increase in firm‘s market share / concentration due to indirect network effects
  - Vulnerability if increase in concentration larger than some threshold (taking guidance from merger guidelines regarding safe harbours)
- **Measurement not straightforward**
- But complex methodology which needs to be applied to a particular market
- Threat of tipping leads to product differentiation and possibly multi-homing which would need to be integrated

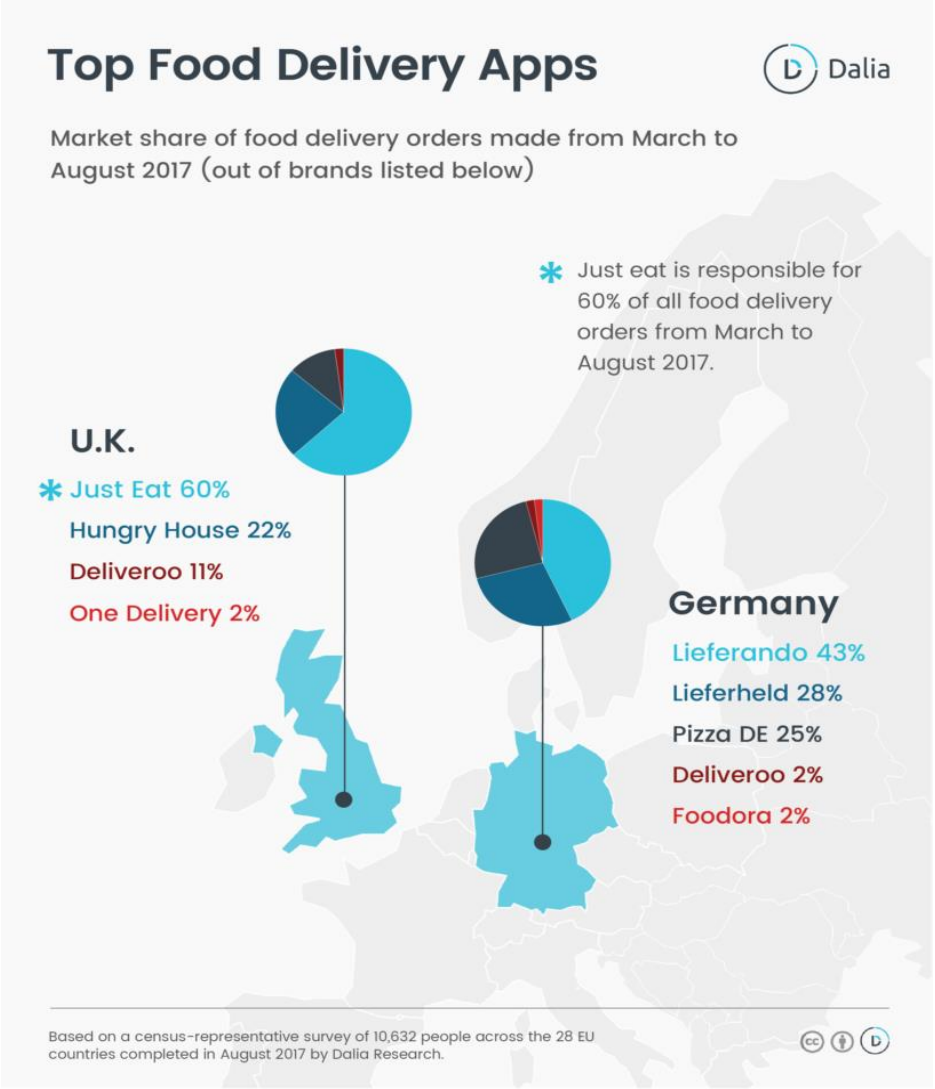
A sufficiently flexible but practical framework is still missing

From now on, given the speed of developments, a practitioner's view will be taken. Here: predicting an s-shaped diffusion curve



See also Hortacsu and Syverson, 2015, Journal of Economic Perspectives

How can one recognize a market as vulnerable? The example – food delivery service apps



- Lieferheld/ Delivery Hero Berlin Start-Up
- Founded in 2011 in Berlin; Rocket Internet entry in 2015
- In DE: Market leader with delivery hero, Pizza DE (2014), Foodora (2015)
- In UK: Exit in 2017, since market leadership can not win (sale of Hungry House)
- Globally active; IPO in 2018 market valuation at € 5 billion
- Break-Even in 2018, active in over 40 countries
- End of 2018 Sale of DE business to Lieferando (NL supplier)
  - One probably doesn‘t have to register
  - Similar to Postbus/ Flixbus
  - Transaction value threshold also does not apply
- UberEAT and Amazon Restaurants are two potential new comers

How can one recognize a market as vulnerable? The example - delivery service apps

- **Fundamentally**
  - Strong (indirect) network effects
  - Quality of the platform increases with availability of data (also from other markets)

→ Here: Econometric analysis of number of restaurants and orders shows indirect network effects, albeit small; strategy documents and survey indicate medium to strong network effects

- **Non-differentiated platforms**
  - Several non-differentiated platforms may coexist if a customer group prefers to be listed with fewer users (e.g. restaurants with their local competitors).
  - Multi-homing also allows coexistence of similar platforms and weakens indirect network effects

→ Here: Multi-homing for restaurants simple and customary; for customers the opposite

- **Different user preferences**
  - Niches of loyal customers, e.g. for certain restaurants
  - Local Markets

→ Here: Largely undifferentiated; delivery service apps with their own delivery service; possibly differentiated supplier from the restaurant point of view; local differences in market position and competitor environment, but national advertising and price setting

As a result:

- **The market for delivery service apps appears vulnerable**
  - The result is a tendency towards monopolisation
  - Indirect network effects, especially on the customer side (excessive advertising expenditure)
  - Multi-homing of restaurants should actually allow parallel apps
  - Only limited possibility of differentiation in the business model
  - Big players (Uber and Amazon) plan to join

→ The market should be considered vulnerable and certain rules of conduct should be prohibited

→ Consolidation at the moment among independent insiders, and (not yet) by the large platforms in neighbouring markets

And some conceptual questions

- Market definition will play an important role given the focus on the market more than on a single dominant firm. Given the evolving business models this will require a regular re-assessment.
- When assessing criteria for declaring the vulnerability of markets, thresholds, e.g. for the size of indirect network effects, have to be developed for declaring a market as vulnerable. Reasonable thresholds will only emerge after applying the concept to different markets and re-evaluate past experiences.
- How to view national monopolies contested by potential entry: is this an acceptable market outcome or not? How to judge the disruptive (one off) potential of global platforms?
- For online food delivery services, the assessment benefited from experience from other countries/ regions. In markets with stronger economies of scale and scope (and a lower level of regional differentiation and entry barriers), a reliance on such cross-market evidence may not be feasible.
- There is a question on whether vulnerability is a permanent feature of a market. Hence, a sunset clause approach to a specific market may not be sufficient.

Conclusion

General

- The empirical economic literature is lacking behind the policy makers' call for action

Vulnerable market approach

- Seems workable with the information typically being available to competition authorities
- Obviously, many important implementation questions to be answered

Thank you!

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