Competition in the Digital Economy: Big data and the sharing economy

Massimo MOTTA

ICREA-Universitat Pompeu Fabra and
Barcelona GSE

Lisboa, 16 February 2017

Competition

- **Big Data**: what are the competition issues?

- **Sharing Economy**: opportunities and the importance of having level-playing field

"Messages"

- Competition law and its usual tools are flexible enough to deal with new issues arising in the digital economy (but of course there is work to be done in order to apply them properly to a new context)

- But not all policy issues raised are necessarily competition law issues – hence some interventions are not competition agencies

What is 'big data'?

- Data (information, the way it is represented) has always existed

- But technological developments have radically changed possibilities to collect, store, process, analyse, monetise them

- Data may be '*personal*' (demographic; search and purchase history; photos; social networks; locational; bank and health,…)

  ➔ Data protection (privacy) issues. (But also targeted service!)

- But may also be '*public*' (e.g., fines given by the AdC, Lisbon traffic data, rain fallen in Portugal, etc..) although may be costly to collect

- Data are *non-rivalrous* (access to data by one does not preclude others from accessing them, *in principle*; but there may be issues of exclusivity, or barriers to entry at collection stage)

The 4 'V's (or are they 5?)

- **Volume** of data

  - Decrease of cost to collect, store, process and analyse data

- **Velocity** of data

  - Approaching real-time: e.g. Geo-localisation data

- **Variety** of data

  - Sources of collection multiplied and data combined

- **Veracity** of data

  - Accuracy matters

- **Value** of data

  - Extremely valuable to firms, also due to improvement in data analytics (e.g., machine learning, algorithms,…)

Possible competition issues?

- One or more firms (Google, facebook,…) 'gatekeepers' of data

  - Possible manipulation of information (but not a comp. issue)

- One or more firm may know too much about us

  - Worrying, but not a competition issue (➜ privacy rules crucial!)

- And if it uses what it knows about us to price discriminate/targeting?

  - Welfare effects of price discrimination are unclear: lower price to poorer people ➜ output and surplus increase

  - (And is it so unfair that somebody who is resident in a poor area is offered a lower price than one living in a posh area?)

  - Better 'targeting' may also give us more relevant information

  - But discrimination by personal data may raise important 'political' issues

Possible competition issues, II

- Having 'lots of' data, not an issue by itself; but having data which are essential (and not reproducible) inputs in some market might well be…

    - Barriers to entry in collection, storage, analysis or usage?

    - Impossible to reproduce (network effects, large fixed sunk costs) or buy them from source or third parties?

    - Data may be the result of effort and investment: policy should not prevent appropriability unless really necessary

- Possible (exclusionary) abuse of dominance ➜ next slide

- Merger control: merged entity should not have unique access to data

- Do algorithms facilitate collusion? (UK "online posters" case: the parties used repricing software to implement an illegal agreement)

- *IMS Health* (copyright on how organise a database)

- *Nielsen* (exclusive contracts for scanner data with all the major supermarkets in Canada)

- *GDF-Suez*: French CA ordered to grant access to data it collected while public monopolist (not fruit of innovation!)

- *Facebook* (Bundeskartellamt): Exploitative abuse (unfair terms of service conditions to users), or just violation of data protection provisions?

    (In my opinion, this is not a competition law issue, but a consumer protection or 'privacy' regulator problem)

Big data: conclusions

- Sometimes new markets, products, technologies create new challenges and issues

- Competition law has tools and a framework which can be applied to assess market competition issues

- But of course not all the issues are necessarily competition issues, and other policies should be used to solve non-competition issues

- In the case of "big data", there are some issues of privacy, consumer protection, (political access etc.,) which do not belong to competition policy

- Similar conclusion will apply to issues coming from the development of the "collaborative economy"…

Barcelona GSE — Graduate School of Economics

There's an Uber for Everything

Apps do your chores: shopping, parking, cooking, cleaning,

ILLUSTRATION: ROBERT NEUBECKER

- A platform relates agents who are on different sides of the market (absent the platform, peer-to-peer relationships will not arise due to coordination or transaction costs)

- A service platform may arise whenever there are under- or unutilised assets on one side and possible demand for them on the other

- The service may be for profit or just cost-sharing (e.g., *BlaBlaCar*)

- The platform may centralise matching and set prices (e.g., *Uber*), or offer decentralised matching and just advise rates based on past data and experience (e.g. *Airbnb*), or set up an auction (*eBay*).

- Ex post reputation mechanism rather than ex ante screening (issue: how to provide incentives to leave truthful feedback?)

Peer-to-peer markets are characterised by:

- Small flexible sellers with low entry costs

- Spot transactions, no need for lengthy contracts

- Use technology to match buyers and sellers and/or to implement flexible pricing (which may induce more supply in times of high prices) or auction-based pricing

- Maintain quality by using reputation and feed-back mechanisms

- Reduce costs by by-passing regulation

Rationale of taxi regulation: existence of market failures

• Information asymmetries: quality cannot be determined until consumed; safety standards; (open access: negative externalities such as pollution and congestion?) ➔ Minimum standard; licenses

• Taxi drivers may "hold up" customers ➔ Price regulation

Is there still need for regulation?

• Some market failures are eliminated/reduced by innovation:

    • rating systems seem a reliable reputation mechanism

    • users know the (approx) price before the ride

    • price flexibility also allows for supply adjustments

Uber: what is the issue?

- Judgments and/or legislation against Uber in many EU MSs. Why?

    - Security/safety issues? Tax avoidance? Escaping labour regulations? Unfair competition?

    - Harm to incumbents! Taxis have paid licence fees and want to preserve monopoly rents they have thus far enjoyed

- Prohibiting Uber is not justified by regulatory needs (and it has benefited consumers and led to innovations)

- However, crucial to maintain the level-playing field and make Uber (and same applies to Airbnb etc.) respect existing regulations

- Not a competition law issue, but NCAs may play a role (e.g. advocacy, or cases in specific circumstances)