European Commission

EU-India Competition Week

Day 1, Session I:

Big Data and competition law enforcement

Vera Pozzato

9 December 2019

Competition

Competition and digital markets

Is competition in or for digital markets "different"?

- Fast moving industries. Even strong positions are short lived, with monopolies displaced by disruptive new entrants
- Network effects - Extreme returns of scale - Multihoming – status quo bias
- Risk of discouraging innovation and entrepreneurship
- Role of platforms – data accumulation – innovation

Criticisms from different directions

- Is antitrust necessary at all?
  - No need for antitrust because of technological developments - technology will displace “entrenched” market positions

- Is antitrust sufficient/are its tools suitable?
  - Can’t deal with “new phenomena” like two-sided markets, network effects, free products, data …
  - Need for tailored tools or different tools in digital markets
  - Or more systemic policy/regulatory solutions
  - Too slow

Importance of data

- Data is a crucial input in the digital economy, especially for the purpose of training **AI algorithms**.
- Data is also a **crucial input to many online services**, production processes, and logistics.
- The competitiveness of firms will increasingly depend on timely **access** to relevant data and the **ability to use** that data to develop new, innovative applications and products.

Importance of data

- On the one hand, based on the above, the **broadest dissemination** and use of data by the greatest number of firms would seem to be desirable.

- On the other hand, however, the efficiencies of broad data dissemination must be **balanced against** a number of other policy concerns, such as the need to ensure sufficient investment incentives for firms to collect and process data, the need to protect privacy (where personal data is concerned) and business secrets, and the possible collusive aspects of data sharing.

➢ **The significance of data and data access for competition will thus always depend on an analysis of the specificities of a given market, the type of data, and data usage in a given case.**

Many different types of data

- Data can be categorised as **volunteered, observed, and inferred** data.
- Data can be **collected and used in different forms**: individual-level data, bundled individual-level data used anonymously, aggregated-level data and contextual data.
- Data can be generated at **different frequencies**, and data access can either concern historical or real-time data.
- Data can be **personal or non-personal.**
- Data can be **requested and used for many different reasons** (e.g. to provide complementary services to a service provided by a dominant firm, or for the purpose of training algorithms including for uses that are completely unrelated to the fields of activity of the data controller).

Two key concerns

- digital players are not giving consumers enough **data protection**, and that competition law can and should address this issue. This raises the question of the interaction between competition law and data protection law.

- digital players are **accumulating such large amounts of data** that they are gaining an insurmountable advantage. This raises the question of the interaction between competition law and regulation of data ownership and data governance.

Data protection

- **Privacy issues** were also mentioned as a competition concern during DG COMP digitisation conference in January 2019.
  - The question was raised whether large platforms in particular can extract more data from their users than the value of the services they provide to users, even if these services are free.

- Privacy is also at the centre of the recently case against Facebook in Germany, which found that Facebook abused its dominant position when it integrated data from different Facebook platforms (Instagram, WhatsApp) and third party sites into its users` Facebook accounts.

- In its 2006 *ASNEF* judgment, the ECJ stated that **data protection issues "as such" are not a matter for competition enforcement**. Meanwhile EU data protection law is now strengthened thanks to the GDPR – in force since 25 May 2018.

General data protection regulation (GDPR)

- GDPR is the legal framework that sets **guidelines for the collection and processing of personal information** from individuals who live in the EU.
  - Under the rules, visitors must be notified of data a website collects from them and **explicitly consent** to that information-gathering, by clicking on an Agree button or other action.
  - Websites must also notify visitors in a timely way if any of their personal data held by the site is **breached**.
  - GDPR also calls for any personally identifiable information that the website collects to be either **anonymized or pseudonymized** (with the consumer's identity replaced with a pseudonym).
  - GDPR introduces **data portability** – the right for a data subject to receive the personal data concerning them in a 'commonly use and machine readable format' and have the right to transmit that data to another controller.

Data protection as quality

- Data protection issues can enter the competition analysis in situations where consumers view data protection as an element of the quality of a product.
  - many online services are superficially "free" – in that there is no explicit or monetary price – so the competition analysis may shift to ensuring quality (as well as choice and innovation).

- The "data protection as quality" view remains to be checked on a case-by-case basis.
- Probably for many people, data protection is not a key factor of the quality of their coffee capsules (even though Nespresso tracks people's purchases).
- But for many people, data protection is a factor when choosing an online messaging service, for example. It depends on the product.

Data as currency

- In many cases, data are being handed over in exchange for online services, and the data are **monetised on the other side of the market** through targeted advertising.
- The "data as a currency" perspective means that when an online service extracts my data, I experience this as a loss, just like handing over some of my money.
- But handling over a quantity of data is only part of the picture.
  - What matters to privacy-conscious consumers is not just **how much** data they hand over.
  - It's also **how protectively** those data are being treated – how long they are being stored, with whom they are shared, for what purposes, and whether consumers are being adequately informed about all this.

Degradation of data protection

- When a merger or an agreement or unilateral behaviour degrade competition on data protection as an element of quality, competition enforcement may kick in.
- For example, in Microsoft/LinkedIn, the Commission found that the merged entity would likely degrade competition on data protection as an element of the quality of professional social networks.
- As regards an abuse degrading data protection, it could be, for example, an exploitative abuse – excessive data extraction – although the parallel with excessive pricing does not work perfectly.
- In this regard, one may see some results from the Bundeskartellamt's *Facebook* case and learn from it, where appropriate, although that case is based on German competition law, not EU competition law.

Data accumulation

- The accumulation of data can become a competition concern if this creates **very high (even unsurmountable) barriers to entry/expansion** for rivals, making it near impossible to challenge incumbents.
- This is particularly problematic where such firm did not acquire such data through **competition on the merits**
- This is to be checked on a **case-by-case basis**.
- The Commission does not claim that data in itself always gives its owner a "data advantage". But it also not always the case that data is abundant and that there can never be a "data advantage".

Data accumulation

- An example of data acquisition which is not "on the merits" would be an agreement to get **exclusive access** to a data source, or a data pooling agreement that excludes some competitors.

- Another example of data acquisition which was not "on the merits" can be found in the French Engie case and in the Belgian Loterie Nationale case.
- In both cases, dominant firms obtained customer contact details in regulated markets where they held a legal monopoly, and re-used those contact details in liberalised markets.

Data advantage

With regard to the data advantage, one may need to ask a number of factual questions to check that it exists in a given situation:

- Is the data important to the quality of the product?
  - Certainly, insights from data are key to designing a search engine, for example, but perhaps not to design a fridge or a TV, even though they can also rely on data.
- Is it about the data or the ability to draw insights from data?
  - The majority opinion nowadays is that it is the dataset, rather than the ability to write code to analyse data, which is the key competitive advantage.
- How quickly does the data become outdated?
  - If the data becomes quickly outdated, this answer cuts both ways: on one hand, the data requester does not need historic data. On the other hand, the data requester needs access to a constant data stream from the dominant firm, not just a fixed dataset.

Data advantage

- Are there decreasing returns from data?
  - If there are decreasing returns, the data requester may already have enough data to have a well-functioning product.
  - However, recent experience shows that even with decreasing returns, as long as more data brings returns, such returns can be crucial to the success of the product in terms of the accuracy of its algorithm.
  - Moreover, while there are often decreasing returns from obtaining more data of the same type, there may be increasing returns from obtaining different datasets. Cross-checking datasets can yield insights that would not be available from a single type of data, however abundant.
- Does the GDPR place limits on the data owner's ability to use the data to turn it into an advantage for himself?
- Is the data replicable or available from other sources?

Remedy: access to data?

- If the remedy were to order a firm – perhaps a dominant firm, or a merged entity – to **hand over data to others**, would consumers be happy to see that their data is being spread around?
- There is potentially a **tension**:
  - ordering access to data could solve competition concerns but create data protection concerns at the same time.
  - In the *Engie* case, for example, the French competition authority decided to let consumers opt out of sharing their data. Consumers could write to Engie to oppose sharing their data as part of the remedy.
- Another way would be to implement a **technical solution** that consists in "taking the algorithm to the data".
  - Since the purpose of data is often to train algorithms, the purpose is fulfilled if the algorithm is able to query the dataset and receive insights from aggregated data, instead of receiving actual data.
  - In this solution, the one who queries the dataset cannot copy or even view the data. This solution already exists but is not yet widely used.

Special Advisors Report on Competition Policy for the Digital Era (2019)

- Competition law can contribute to the further development of the data economy in two important ways:
  - It can provide more **guidance** to firms regarding the conditions under which **data sharing and data pooling** could be considered pro-competitive, especially with regard to aggregated data.
  - it can specify the different scenarios and **conditions under which dominant firms – and in particular dominant platforms – are required to grant access** to data.
- Mandated data access will be a sector-specific regime, subject to some sort of regulation and regulatory oversight.
- Nonetheless, competition law can specify the general preconditions and give a more fundamental, pro-competitive orientation to the regulatory regimes that are likely to arise.

The role of Regulation

Regulation has a significant complementary role, notably in case of

- systemic and recurrent market failures that are unrelated to the exercise of market power ->
- horizontal solution applying to a particular sector or the economy as a whole required

Two examples

- P2B Regulation, which is aimed at increasing transparency and fairness in the relationship between online platforms and the businesses using them

- Geoblocking Regulation, which is one of the measures initiated by the Commission in order to boost e-commerce by removing unjustified barriers to online shopping.

Data related merger cases

Mergers in the digital economy

- Common **features** of digital mergers:
  - May involve fast-moving markets, zero-price services and markets characterized by network effects
  - May concern platforms that both serve as an “entry point” (access to the platform) and compete to market services on the platform (platform’s “dual role”)
  - May involve business that generate and rely on large amounts of data
- Common **concerns** with digital mergers:
  - Large digital companies do acquire a lot of small targets
  - Acquisition of nascent competitors may preempt competition by allowing the main digital players to control the target’s innovation and acquire their data
  - Entry of a plartform via a merger on a market for which it is an important entry point can lead to marginalization of competitors

facebook / WhatsApp (2014)

- Assessment challenge in zero-price market (§97-100):
  - No value-based metric to calculate market shares
  - Volume-based metric: use of "reach" data presented shortcomings but used as a second-best in absence of adequate data on actual usage (traffic volumes) of messaging ("consumer communications") apps
- Data aspect (§164 *et seq*.):
  - ToH: using WhatsApp user data to improve Facebook's targeted advertising service and strengthen Facebook's position
  - Dismissed: (i) unclear that Facebook could collect WhatsApp user data, (ii) even if it did, a sufficient number of alternative providers of targeted online advertising would remain and (iii) a significant number of companies that collect user data (Google, Amazon, Microsoft) would remain after the merger. Accordingly, no ground for concerns.
- Side-note: EUR 110 million fined imposed on Facebook in 2017 for providing incorrect information concerning its ability to perform automatic user matching between the two services

Microsoft / LinkedIn (2016)

- Data issue (§246 *et seq.*):
  - LinkedIn data ***not*** an important input for CRM software
  - Data not licensed pre-merger and no evidence that LinkedIn would have given access to its full data absent the merger
  - Data not unique and only one of many different datasets
- Platform aspect (§301 *et seq*.):
  - ToH: leveraging of Microsoft's strong position from PC OS market to professional social network (PSN) market, foreclosing rival PSNs
  - Implemented by pre-installation of LinkedIn app on Windows PC and denial of competitors access to Microsoft application interfaces
  - Would have led to increasing LinkedIn user-base (aggravated by network effects) and "**tipping**" the market in its favour. Other PSNs would have been marginalized.
  - Microsoft's commitments: (i) to allow PC manufacturers and end-users to uninstall a possible LinkedIn app/icon on Windows OS; and (ii) to enable competing PSNs to integrate with Microsoft products on a non-discriminatory basis.

European Commission

Apple / SHAZAM (2018)

- Assessment of the role of data in digital music (§64 *et seq.*)
- Data as an input (§317 *et seq*.):
  - ToH (vertical): foreclosing access of competing music streaming apps to Shazam's user data
  - Dismissed due to insufficient importance of Shazam's data. Methodology relied on benchmarking Shazam's data against alternative databases on the basis of "4 Vs" approach:
    - French Competition Authority and Bundeskartelamt Joint Report on Competition Law and Data (2016)
    - **Variety** of the data (demographic and behavioural data), **velocity** of data (the speed at which it is generated), its **volume** and its **value**
- Data as competitive advantage:
  - ToH (horizontal): strengthening Shazam's position in targeted online advertising by using Apple's data
  - Dismissed: (i) low market shares, (ii) existence of far larger competitors in targeted advertising and (iii) existence of equivalent databases collected by competing streaming apps.

The future of digital mergers

- Special Advisors Report on Competition Policy for the Digital Era (2019):
  - The EUMR's substantive test remains adequate
  - In acquisitions of start-ups by dominant platforms/ecosystems, conglomerate theories of harm should be revisited.
  - Foreclosure of rivals in complementary products/services is not the sole concern
  - Such mergers may seek to strengthen a platform's dominance by (i) intensifying loyalty of users and (ii) retaining otherwise defecting users.

Data related antitrust investigations

Google cases

- A firm's use of data can be relevant to **prove dominance or to assess the effects of an abuse**, or the effectiveness of remedies.
- In the **Google Android and Shopping** cases the Commission concluded that:
  - "*because a general search service uses data to refine the relevance of its general search results, it needs to receive a certain volume of queries order to compete viably. The greater the number of queries a general search service receives, the quicker it is able to detect a change in user behaviour pattern and update and improve its relevance*".
  - "*a general search service also needs to receive a certain volume of queries in order to improve the relevance of its results for uncommon ("tail") queries. The greater the volume of data a general search service possesses for rare tail queries, the more users will perceive it as providing more relevant results for all types of queries*".
- In the **Google Android** case the Commission also concluded that "*Google's strategy prevented rival search engines from collecting more data from smart mobile devices, including search and mobile location data, which helped Google to cement its dominance as a search engine*"

Amazon investigation

- **Access of vertically integrated platforms to commercially sensitive information of businesses on their platform** can also be a competition concern if the platform then uses this information to gain an unfair competitive advantage
- In this context, the Commission is looking into whether Amazon is abusing the data gathered from sellers on its marketplace to favour its own retail activities.
  - When providing a marketplace for independent sellers, Amazon continuously collects data about the activity on its platform.
  - Based on the Commission's preliminary fact-finding, Amazon appears to use competitively sensitive information – about marketplace sellers, their products and transactions on the marketplace.

Conclusions

Conclusions

- There are currently no indications that EU competition law would not be able to address the challenges we are facing in digital markets.
- Data access related issues are not new for competition law enforcers. They have actually been a core element in DG COMP merger investigations for some time now, starting with Google/DoubleClick in 2008, followed by many others such as Facebook/WhatsApp (2014), Microsoft/LinkedIn (2016) and Apple/Shazam (2018).
- The examples discussed in this presentation and in this afternoon session show that Articles 101 and 102 TFEU allow us to effectively tackle anti-competitive conduct in digital markets.
- Regulation has a significant complementary role, notably in case of systemic and recurrent market failures that are unrelated to the exercise of market power.