Big Data as a Competition Issue: The EU Commission’s Approach – More Care Needed?

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Motivation

- EU’s emerging “Digital Agenda”:
  - Technology markets seen to be engines of innovation, and key productivity drivers;
  - Uptake of advanced digital technologies by European manufacturers seen as too low, and too narrowly based.

- New EC leadership and agenda still settling in:
  - Zeroing in on issues re “big data”, and possible responses;
  - Standards-setting seen as a lynchpin of uptake – IoT, cybersecurity, cloud computing, data processing, ...
Some Key Tensions

- **Tension(s) 1** – lack of agreement re problem definition:
  - Sub-tension (a) – is trading away privacy a *payment in kind*, affecting true “price” and hence competition assessments, OR is it a *co-investment in kind*, with consumers as joint producers?
  - Sub-tension (b) – is data ubiquitous and non-rivalrous – OR does it obtain unique characteristics enabling creation of “data moats”?
Some Key Tensions (cont’d)

- *Tension(s) 2* – does increased ability to mine huge new databases for novel correlations help consumers/society more than it helps firms, OR vice versa?
  - Sub-tension (a) – consumers versus firms;
  - Sub-tension (b) – individual consumers versus society.
“Regulatory Bundling”? 

- Tim identifies another unsettled question – should competition law concern itself with other policy objectives?
  - Privacy and consumer protection as possible areas of overlap;
  - Are competition agencies institutionally adapted for newly emerging overlaps?

- Lisbon Treaty a possible driver of converging objectives:
  - Places concerns like privacy at the heart of work across agencies, including competition authorities;
  - Effectively mandating greater “regulatory bundling”;  
  - “Pancaking” other objectives on already-horizontal competition agencies (vs vertical industry regulators).
Some Possible Frameworks

“Traditional” approach – data as critical input:

- Assess risks of foreclosure, raising rivals’ costs, lowering quality, delaying access to new features ...

Some possible new approaches (Coates):

- Privacy as consumer protection issue – human right (plus issue of unwittingly ceding privacy);
- Privacy as dimension of consumer welfare – e.g. for merger analysis;
- Relatedly, impact of mergers on “privacy discrimination” – do they lead to better or worse tailoring of privacy offerings?
- Data protection and privacy as non-price competition.
The Cases

- **TomTom/TeleAtlas:**
  - Traditional (backward) vertical integration analysis, but with critical input being data;
  - On facts, EC chose to allow merger, but signalled *upstream data could be treated as critical input*.

- **Google/DoubleClick:**
  - Recognised data monopolisation a risk in digital economies – particularly though data *accumulation*;
  - Focused on data differentiation/replicability, and extent of network effects;
  - FTC relied on contractual terms limiting network effects – EU less sanguine (Maginot Line? – contracts are breakable), though recognises market power may be required to impose changes in privacy terms.
Facebook/WhatsApp:

- EC’s first look at social networks – looked at both horizontal and vertical issues;
- Acknowledged problems with market definition, potential competition, role of data in competition;
- FTC – concerned that merged firms might reduce privacy if they competed in privacy pre-merger;
- Search ads direct traffic to merchants, while non-search ads build brand awareness – not close substitutes;
- Less clear re non-search and social networking advertising.
The Cases (cont’d)

- EC’s focus:
  - Echoes of TomTom/TeleAtlas? – EC saw contractual and technical hurdles to Facebook exploiting WhatsApp data;
  - Could Facebook use more concentrated data to strengthen position in online advertising?

- Tim’s concerns:
  - EC treating data as undifferentiated raw material – ignores non-replicability of merger’s accumulated/combined data;
  - Also, ducks issue of overlapping policy objectives – EC stated that antitrust not concerned with privacy, despite growing awareness of need for holistic approach.
Discussion – Four Related Issues

- **Issue 1** – privacy loss as “price” (cf data as “currency”) vs privacy loss as “co-investment”:
  - Competition agencies need to pay greater attention to personal data’s dual/simultaneous roles;
  - Comes up in other sectors facing rise of “prosumerism” (e.g. PV panels in electricity) – customers no longer (always) just consumers;
  - Complicates assessment of competition impacts – different types of customers with changing roles in different circumstances.
Discussion – Four Related Issues (cont’d)

- **Issue 2** – measuring customer welfare when mergers affect privacy:
  - Not as novel as it may seem – e.g. possible to estimate electricity consumers’ willingness to pay for reliability, or hikers’ WTP for solitude in a forest park;
  - Amenable to measurement using discrete choice demand estimation methodologies – important to allow for differing tastes for privacy!
  - Related to Issue 1 – privacy as conflicting demand shifter ...
Measuring Privacy Impacts on Welfare

Ceding personal information (i.e. privacy) can improve product quality
⇒ Increases welfare for given price...
Ceding personal information (i.e. privacy) can improve product quality → Increases welfare for given price ...

... but if privacy is something consumers inherently desire (can test this), can think of ceding privacy as a loss of quality, providing offsetting effect → decreases welfare for given price.
Discussion – Four Related Issues (cont’d)

- *Issue 3* – data-based competition raises new antitrust issues and possible remedies:
  - “Big Data” competition – e.g. platforms – characterised by strong scale economies and network effects;
  - Can lead to strategies like “get big fast”, and winner-takes-all competition – markets can be inclined to “tipping” towards monopoly;
  - Emerging research suggests remedies can include open access policies, without necessarily impeding innovation – relevant for merger undertakings?
Discussion – Four Related Issues (cont’d)

- Issue 4 – *private* costs and benefits of ceding privacy can diverge from *social* costs and benefits:
  - E.g. if everyone’s fitbit data was available to all medical researchers, maybe we would cure cancers sooner;
  - Issue for antitrust agencies – assess merger impacts based on private or social benefits?
  - Whatever the (marginal) costs and benefits of privacy were when the Privacy Act 1993 was passed, technologies have changed them, so “optimal privacy” should now be different (at least for some customers) …
Changing Optimal Privacy (Assume Private Costs and Benefits same as Social, and OSFA)
Changing Optimal Privacy (cont’d)

Marginal Benefits, Marginal Costs

MC (1993)

MB (now) – various possibilities! (case-specific)

Optimal privacy in 1993
Changing Optimal Privacy (cont’d)

Diagram showing Marginal Benefits and Marginal Costs over Privacy. The graph illustrates the relationship between the two, with optimal privacy levels indicated for both 1993 and current times. The diagram highlights the differences in cost and benefit between past and present scenarios, suggesting that current conditions make it harder to be private compared to 1993.
Tim has given us an excellent overview of how “big data” issues are crystallising in the EU (and US).

The issues are of different orders of magnitude in New Zealand, and we have less heft to dictate the direction of play – more careful line to tread to ensure customer benefits.

We have much to learn from the defining cases in major jurisdictions – it seems there is still much learning to be done even there.

But we also have the potential in New Zealand to contribute our own clarity to some of the rising/defining issues.

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