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Competition Policy in the Digital Age

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written up by Horatio Mortimer

The rise of the giant tech platforms has raised many questions about the dominance of these companiesⁱ, in terms of not only their market power, but also their political influence and power to adjust individual human behaviours.

In March this year the Digital Competition Expert Panel, appointed by the Chancellor in 2018, and chaired by former Chief Economist to President Obama, Professor <u>Jason Furman</u>, published its <u>report</u> on the state of competition in digital markets. In the same month, the House of Lords published a report on "<u>Regulating in a Digital World</u>."

In April the government published its <u>white paper on Online Harms</u>, which followed <u>reports</u> from the House of Commons Digital Culture Media and Sport (DCMS) Select Committee, and the <u>Cairncross review</u> of journalism in the digital age.

The final <u>report on digital platforms</u> of the Australian Competition and Consumer Commission is due to be published soon, and there is a similar publication from the German <u>Bundeskartellamt</u>. In the US, <u>presidential candidates</u> have advocated a 'neo-Brandeisian' reform of anti-trust policy, Louis Brandeis being the famous trust-busting Supreme Court judge. These emphasise that market dominance of the tech platforms not only creates the risk of abuse of market power, but also creates dangerous concentrations of political power.

The chairman of the DCMS select committee <u>said</u> "some social media companies have been allowed to consider themselves above the law, behaving like 'digital gangsters'. That era of self-regulation is coming to an end."

It is not clear though what form this new regulation will take. How is competition policy related to the regulation intended to address online harms, such as bullying, privacy invasion, disinformation and incitement, or to the rollout of AI and the implications for employment?

LSE ran the '<u>Truth, Trust and Technology Commission</u>', which reported at the end of last year, and considered how new regulation should fit alongside competition. The report recommended setting up a new regulator called the Platform Authority, which should have a strong research and advice function.

How does existing competition policy fit with tech platforms?

The Furman report dealt specifically with competition, and early in the process the panel ruled out the most extreme options such as breaking up the companies, or regulating them as utilities. This was reportedly because although there are some similarities with 'natural monopolies' and therefore nationalised industries, there are also significant differences.

Like natural monopolies, the economic characteristics of digital platforms include very large and increasing returns to scale. But they also include *indirect network effects*ⁱⁱ. A network effect is where the user of the network benefits from there being lots of other users, like for instance a telephone network; while an indirect network effect is where there is a two-sided market, with users on one side, and suppliers on the other. So for example the more restaurants (suppliers) there are on a platform like Open Table, the more the users benefit, and the more users there are looking for a restaurant, the more the restaurants benefit. In this two-sided structure, there is normally some cross-subsidy from one side to the other. Usually the user side is subsidised (often it is free). Often, a new platform requires very large subsidies to both sides before it becomes economically viable, which implies a large amount of start-up capital. Once it reaches the threshold, it can start to grow very fast and become very profitable. However, according to research done by <u>Annabelle Gawer</u>, actually most new platforms don't make it to the tipping point, and 4 out of 5 fail.

The problem with this market structure is that it is very difficult to apply the standard competition tools. Competition inquiries normally begin with a definition of the market, which involves identifying possible substitutions that consumers on either side of the market could make, and then estimating what consumers would do if there were a small price increase. These sorts of questions don't provide meaningful answers in two-sided markets, because as one side of the market is subsidised by the other, there can be various business models with different cross subsidies and it is difficult to know which is most competitive. A price increase on one side might see suppliers move away from the platform, which would then make it less valuable to the consumer, and in turn less valuable to the supplier and so on, and the fast growth can go into reverse. However, it is extremely difficult to pinpoint where that tipping point might be, which is the location of the competitive equilibrium.

These network effects are of course also highly beneficial to consumers, who can benefit from there being a dominant platform. However, often these benefits can also be provided by creating universal standards and interoperability between platforms. Email is a prime example. It is easy to imagine a world in which email had been developed and controlled by a single company. So rather than assuming that platform businesses are natural monopolies and regulating them like utilities, the Furman panel instead focused on how competition might be increased, and how to make sure it is possible for new innovations to enter the market. Universal standards that permit interoperability and data portability could be imposed in ex-ante interventions.

One issue is the habit of large technology companies of buying up all the promising new companies. Google and Facebook have made so many acquisitions that it has become the main exit strategy for founders and investors. None of these have been examined by competition authorities. Takeovers such as those of Instagram and WhatsApp seem like archetypal examples of a dominant player taking over the incipient competition.

It may be possible from reading the trade press, reviewing internal documentation, and looking for an anomalous premium on the acquisition price, to make a judgement on whether or not the acquisition was an attempt to prevent a new entrant from developing into a powerful competitor.

This could involve switching the test from its current balance of probabilities criteria of deciding if there was a greater that 50% chance of reducing competition, to a balance of harms criteria, which would proscribe outcomes with smaller probabilities but that would cause larger harms.

It would also involve taking a more forward-looking economic approach than the current legal approach in the Competition Appeals Tribunal, which relies on static evidence of the present situation, and is therefore backward looking. This would be a major change for the tribunal, moving from looking at cases on their merits to deciding whether the competition authorities had correctly followed the process.

Regulators are naturally very reluctant to intervene on the basis of some very uncertain expectation about the future. One way that platforms grow is often by moving in to new markets to take advantage of the user base they have already built up. For example Uber taking advantage of its vast user base and moving into Uber Eats. This makes it even more difficult for competition regulators to define the scope of the market in the traditional way. And not only do these companies have their user bases, but the way they are valued by the market gives them enormous financial power when entering adjacent markets which can give them an anti-competitive advantage. But on the other hand, big players moving into to new markets do often bring prices down or improve quality.

Can competition policy alone address social as well as market problems?

The other key recommendation of the Furman Panel was an investigation into the online advertising market, which is dominated by Google. The heavily automated processes of auctioning user data and user attention are extremely opaque, and possibly quite fraudulent. The Competition and Markets Authority has already announced that it will investigate. It could be that the advertising business model, which drives the hunt for clicks and the insatiable thirst for personal data, has brought about the evisceration of the news media and the rise of disinformation and is at the root of many of the other digital harms.

Who should do this regulating? The outgoing prime minister <u>announced in June</u> that Professor Furman "has today agreed that he will advise on the next phase of work on how we can implement his recommendation to create a new Digital Markets Unit." So far, it is not clear whether this would be a unit within OfCom, or the Competition and Markets Authority (CMA), or somewhere else, or a new standalone institution.

The institutional structure of a new digital regulator is critically important for several reasons. For example, it is not clear that problems such as privacy can be dealt with through competition, and resolved simply by making sure that consumers have a range of privacy options to choose from, or are given more control over their own data. Much of the damage that can be done by the mass surveillance of citizens happens at the social or political level rather than the individual level, and so the privacy choice that an individual faces may be in the form of weighing their own instant convenience against a negligible impact on a social problem. Or, to put it another way, what individuals choose for themselves, without any influence over the choices of others, may not be what those same individual would choose for society as a whole.

Can regulating standards increase competition?

There may be lessons from the UK's new experiment with 'open banking', which obliges banks to standardise customer information and make it available to other regulated financial organisations when customers ask them to. The idea is similar in that the aim is to give consumers more power over their (financial) data, and remove some of the technical barriers that stop new (financial) service providers from getting into the market. However, while it has unleashed a wave of new FinTech companies, it has not so far resulted in many consumers using their switching power, and it has also raised fears that it will lead to increased financial exclusion (as financial service providers are better able to discriminate), and that it could result in financial instability, as a recent report for the Bank of England has warned.

The Furman panel had a narrow remit to focus on competition and market efficiency. The report ruled out major structural interventions on the basis that uncertainty could damage innovation and consumers would suffer. It therefore advocated a focus on removing the entry barriers created by the lack of interoperability and data portability, and taking impacts on quality into consideration and not just prices.

Data portability is complicated by how people structure their data. EBay has a huge amount of data and it is structured in a way that is useful for them. Making it portable would enable the big players, who are very good at restructuring data, to take EBay data and restructure it in a way that was useful for them. So rather than solve the problem, it might actually entrench the market dominance of the big players.

Will other kinds of online regulation have a counteractive effect on competition?

Furthermore, there is another emerging barrier to market entry. This is that there is already a wave of new pressure on these platforms around the world to spend large amounts of resources on regulating themselves. The Online Harms White Paper sets out how the relationship is changing not in terms of the liability of individual pieces of content, but the overall framework and incentives for platforms to deal with what is seen as harmful content in wide categories. Everything from dis-information to child protection is envisaged as being potentially regulated by a new platform regulator, and a new 'duty of care' will require huge amounts of investment by Facebook and YouTube and others in moderation. It is not clear how this new regulator will be related to the envisaged new competition unit.

Other similar policy frameworks are emerging around the world, such as the <u>NetzDG law</u> in Germany and the new <u>online hate speech law in France</u>. On a very low estimate, Facebook is currently spending around a billion dollars on moderation, which is not all that much as a proportion to Facebook's revenue, but it is increasing rapidly. It has also <u>just announced</u> that it will invest "a significant amount" in engineering resources and building new tools as part of a settlement with the US Federal Trade Commission over privacy violations.

There is a fundamental tension between treating these platform companies as purely consumer service providers that should be allowed to grow to any scale so long as they do not inhibit would-be competitors, and regulating them as media companies.

As Mark Zuckerberg recently observed:

"the more you start to curate, and to select, and to make choices, the more you automatically, and even involuntarily, transform into a publication house, into a media company. And then, honestly, you're just too big. Sooner or later, you will be split up by regulators because they will say there cannot be so much dominance in one company that makes the decisions globally who reads what. So you have to keep a degree of neutrality. So I would strongly recommend not to curate, and to only say, "we stick to the legal framework." so if something is illegal, you take it out."

The power of media companies to direct public opinion makes society much less tolerant of high levels of concentration than they are in ordinary consumer markets. There are principles of autonomy from the state that are engaged with media organisations, which are difficult to reconcile with mandatory content regulation, and while in some countries it is feasible to establish arm's length independent regulation, in other countries this can be much more problematic, and so there is a need to tread extremely carefully. There is a long literature that provides evidence that market concentration in the media is linked to political corruption. In the media is linked to political corruption.

Social media companies are far more sophisticated than traditional media companies in terms of political influence, since they are able not only to direct different information to every individual, but also to do so with

machine learning that uses vast amounts of personal data to discover what information will have the most impact on each person. And this sophistication is still in the early stages of its development.

So Facebook is trying very hard not to be treated as a media company. But it is being forced to do an increasing amount of curation. It is taking down content and creating appeals procedures, and building its own self-regulatory framework. The table shows data from October 2018 to March 2019.

Policy Area	Amount of Content Appealed	Amount of Content Restored After Appeal	Amount of Content Restored Without Appeal	Total Amount of Content Restored * [Amount of Content Restored After Appeal + Amount of Content Restored Without Appeal]
Spam	20.8 M	5.7 M	38.6 M	44.2 M
Adult Nudity and Sexual Activity	2.1 M	453 K	668 K	1.1 M
Hate Speech	1.1 M	130 K	21.2 K	152 K
Bullying and Harassment	496 K	80.2 K	3.5 K	83.7 K
Violence and Graphic Content	171 K	23.9 K	45.9 K	69.7 K
Regulated Goods - Drugs	87.4 K	18.1 K	0.7 K	18.9 K
Regulated Goods - Firearms	80.8 K	6.2 K	0.7 K	6.9 K
Terrorist Propaganda (ISIS, Al-Qaeda and affiliates)	40.1 K	20.3 K	162 K	183 K
Child Nudity and Sexual Exploitation of Children	20.6 K	0.7 K	6.4 K	7.1 K

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Not only is the cost of all this obligatory self-regulation a significant barrier to any would-be competitor, but the activity itself is making Facebook take on the responsibilities of a media company, for which we have traditionally had different standards for corporate dominance, including the principals of media plurality.

On the other hand, the recent actions of regulators on privacy, such as the Information Commissioner's fine of British Airways of £183m for a data breach, and Facebooks \$5billion dollar settlement with the US Federal Trade Commission for privacy violations are changing the economic calculations for many companies about the costs of collecting and storing personal data. Perhaps this will encourage innovators to create new less invasive services.

What other innovative new policies are being discussed?

In Estonia, which is something of a digital pioneer, people <u>control their own data</u>, at least with respect to public services. Perhaps this can help people to gain a more specific notion of data privacy, which could change the way they look at how tech platforms use their data, and help them to hold them accountable.

Another innovation is BBC <u>DataBox</u>, which is a piece of hardware on which people keep their own data and that enables individuals to securely manage third-party access to their personal data, including online sources of data, and allows them to authorize third parties to provide the Databox owner with authenticated applications and services.

Another idea is to think about these databases in the way we do about patents. We want to encourage innovation, but we don't want to create permanent monopolies, so perhaps there is some way that companies should be allowed to build services that they have exclusive rights to exploit, but that after a certain period of time, the exclusivity expires.

Perhaps the most potent policy innovation would be a tax on digital advertising^{iv} (rather than on digital services in general), which could have a very significant impact on the cost benefit calculation and halt the insatiable quest for personal data.

What are the limitations of national governments acting alone?

There are also a number of challenges specific to the UK when it comes to ensuring these giant global corporations do not stifle competition. Brexit requires the transfer of competition regulation from the

European Commission to the UK authority. The European Commission has been very effective in previous cases where dominant technologies or platforms have been overturned, and it has often forced the companies to change their behaviour in ways that have allowed competitors to enter the market, for example with Microsoft Internet Explorer. The UK on its own is unlikely to have the power or authority to carry out such major interventions (or even to force them to pay tax), and will probably have to continue to rely on the EU to take action against these global giants.

This is partly because the size of the UK market which will not be of such significant concern to the platforms, and also because banning them from operating within the UK and denying UK consumers their cherished services that are readily available across the rest of the world will not be a credible threat.

Furthermore, the resources of the UK CMA will be dwarfed by those of Google and Facebook etc. who can easily deploy a hundred of the world's best-paid lawyers to defend them. Even US and EU regulators are at a disadvantage. This may be in part responsible for what many people especially in the US consider the dovish reluctance that competition authorities have taken to enforcing their powers to intervene when a company acts to remove a future competitor. There are always well-resourced parties arguing for mergers. There are rarely well-resourced parties arguing against mergers.

Perhaps the UK's best hope of effecting change is through playing an influential role in an international debate on technical standards, in a similar way that it did in broadcast standards and internet standards. The UK created the BBC, which changed the character of competition, and set certain kinds of standards, both in quality and in technology. Is there an opportunity to build a public service social media company on the same model?

Does international competition among national champions create the same economic benefits?

The <u>battle over international standards</u> is heating up, and they are going to be extremely important, especially for AI. The rising challengers to the American tech platforms are the Chinese tech platforms, Alibaba, Tencent and Baidoo, and these work in a culture which <u>values things like privacy very differently</u>. This kind of competition may have completely the opposite than the effects that the Furman report hopes for on digital harms. Rather than providing the consumer with clear choices on levels of privacy, it could instead intensify the technological battle to undermine regulation.

Conclusion

The zeitgeist has shifted. Competition policy has for a long time been concerned with the consumer, and intervening only when there is quantifiable proof that market abuse has already done them economic harm. As well as highly paid lawyers, corporate giants have also had the support of the eminent economists of the Chicago School. Especially in the US, where political capture is a serious problem, this may be changing, and there is a rising movement that looks back to the original Sherman Act and the idea that concentrated corporate power is a political problem. This advocates either breaking up the platforms, for example separating the ownership of the platform from the content, or forcing the platforms to incorporate as public benefit companies with articles of association that spell out a very strict duty of care. Is there any way this can be done while preserving the incentives to continue producing innovations that bring so many obvious benefits? If this movement gathers force, the tech platforms will no doubt try to resist it. Will we then find out just how powerful they have become?

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Jean-Charles Rochet, Jean Tirole, *Platform Competition in Two-Sided Markets*, Journal of the European Economic Association, Volume 1, Issue 4, 1 June 2003, Pages 990–1029, https://doi.org/10.1162/154247603322493212

Also, Economists <u>Carl Shapiro</u> and <u>Hal Varian</u> published their prescient book <u>Information Rules</u>: A <u>Strategic Guide to the Network Economy</u> in 1998. <u>https://hbsp.harvard.edu/product/863X-HBK-ENG?Ntt=varian&itemFindingMethod=Search</u> Varian went on to become chief economist at Google in 2002, where he remains today.

^{*}Introductory remarks

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ⁱ See: *Digital dominance : the power of Google, Amazon, Facebook, and Apple /* edited by Martin Moore and Damian Tambini https://core.ac.uk/download/pdf/154423130.pdf

[&]quot;The seminal economic paper is:

iii See for example: Besley, Tim and Prat, Andrea (2006) *Handcuffs for the grabbing hand?: media capture and government accountability*. American economic review, 96 (3). pp. 720-736. https://www.aeaweb.org/articles?id=10.1257/aer.96.3.720

iv See: <u>Beyond Fixing Facebook: How the multibillion-dollar business behind online advertising could reinvent public media, revitalize journalism and strengthen democracy</u> By Timothy Karr and Craig Aaron Free Press February 2019