

e-Competitions

Antitrust Case Laws e-Bulletin

Platforms

“Follow the Money” - Mapping issues with digital platforms into actionable theories of harm

DOMINANCE (NOTION), FOREWORD, ADVERTISING , INTERNET, COMPETITION POLICY, ECONOMIC ANALYSIS, ONLINE PLATFORMS, BIG TECH

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1. DO WE STILL CARE ABOUT ANTITRUST? ISN'T IT ALL ABOUT “BREAK THEM UP” OR “SMART EX-ANTE REGULATION”?

The policy debate around “digital platforms” has been increasingly animated (particularly in the US) by calls for direct intervention by law makers to bring about major change (including structural breakups) on the basis that the antitrust tool is just too narrow and ineffectual to deal with their “vast power” in its multiple negative manifestations. The sentiment that antitrust is limited in its reach is voiced also by veterans like Carl Shapiro, cautioning that antitrust enforcement cannot deal with a lot of the big societal issues we are worried about (*“Antitrust is not designed or equipped to deal with many of the major social and political problems associated with the tech titans, including threats to consumer privacy and data security, or the spread of hateful speech and fake news. Indeed, it is not even clear that more competition would provide consumers with greater privacy, or better combat information disorder: unregulated, competition might instead trigger a race to the bottom, and many smaller firms might be harder to regulate than a few large ones”*, forthcoming Journal of Economic Perspectives). “It is not clear” – perhaps. But “more competition” has a lot of properties we like. Less competition is unquestionably bad. And the limitations of antitrust should not provide a justification on the one hand for a view that it is so blunt it needs to be superseded by regulation or legislation; and on the other, for a view that it is a “pure” discipline that can only be applied in very precise and limited settings, based on careful precedent, and no more.

I would like to make the opposite case: that antitrust tools should be seriously dialled up and can play a major role in the digital space if we are willing to evolve the economic (and legal) thinking on theories of harm in a way that (remaining consistent with key principles) is not just bound by the usual caution (“what if we break it”) and the search for “precedent”. Unprecedented phenomena require unprecedented thinking. The Microsoft case of 20 years ago cannot be held for all times as the only relevant blueprint for antitrust enforcement against “tech giants”. [7] Yes, theories of foreclosure and leveraging “à la Microsoft” play a major part in these settings, with network effects and strong incentives to exploit user bases to grow in adjacent services (economies of scope). We have multiple examples of leveraging through tying, refusing to interoperate, diverting traffic away from others, forcing pre-installation and default status, all to leverage power from an original market and deprive rivals of traffic in an adjacent market. All good classic harms.

Yet these mechanisms are not all there is. There are other concerns arising in these settings in the form of “coercion” of counterparties (businesses and consumers), “unfair bargains” – where a dominant platform is able to extract too much rent, or can force a business trading on the platform to accept terms it would not have agreed to if it had other viable alternatives. “Excess prices” is not the only form of exploitation, and it is not all about dynamic leveraging à la Microsoft.

This article makes two points. First, that we can use the antitrust toolkit more expansively and aggressively to pursue a wider catalogue of potential harms: taking up more issues, opening up multiple cases, looking at concerns earlier on a preliminary basis (and where the conduct may undermine in the short term the survival of small dependent counterparties, being quite liberal with interim measures). The economic models we use need to be extended to the digital environment and reformulated in the language of platforms, but it can be done. We have indeed done this already in a few areas: most directly, extending models of exclusionary tying and bundling to “free” environments with a “zero price constraint” in Android; [2] but further, by modelling the effects of a platforms’ preferences for ad-funded models for the quality of journalism, and writing models that show the connection between exclusionary and exploitative conduct that is designed to recoup the costs of exclusion in the area of digital advertising. These models are being worked on and will provide sound foundations. Claims that dialling up the antitrust tool will involve disruption to business and “chill innovation” do not have much bite in my view – we worried about “Type 1 errors” (the risk of overenforcement) uniquely for years, but not enough about “Type 2 errors”. The price to pay for being large and powerful may well be close scrutiny and indeed some disruption.

Second, in developing theories of harm that “fit” the conduct, it is useful to be clear about how the different so-called “digital platforms” differ profoundly in terms of key characteristics. There is no such thing as a “problem with the GAFAMs”, “the FANGs”, “the FAAMGs”, whichever collective acronym one might want to use. They are also not all “platforms” in a strict sense. Unlike the telcos of old, which were fundamentally uniform in terms of business model, monetisation and technology, these differ in certain key dimensions which drive their respective incentives and can help explain conduct. To compound the difficulties, business models are also evolving and this may modify incentives as we go. We need to understand this in order to craft theories of harm that make sense. The *business model* is one key dimension, *economies of scope in data* is another (what does the “platform” get to “see” in term of user data, that it can exploit to expand in other areas in ways that can involve problematic conduct?).

The paper starts by sketching distinctions across “tech giants” in terms of business models and economies of scope in data use, and how these may generate incentives for conduct we worry about. It then discusses how thinking about economic theories of harm needs to develop to capture these concerns. Some of this economic work is underway. It finally goes back to argue that the tools we have should be used creatively to accommodate these ideas, so that antitrust enforcement can send the right signals. It is not all about regulation, or “break them up”.

2. “FOLLOW THE MONEY” (AND “FOLLOW THE DATA”)

What is generically often referred to as “digital platforms” (the “GAFAM, FANG” etc.) is in fact a very heterogeneous collection. It encompasses internet businesses offering free services to users and monetising just (or primarily) through the sale of advertising (most obviously Google and Facebook). There are “transaction” or “match making” businesses that intermediate between two or more sides and “take a cut” when a deal is struck (e.g. Uber, Deliveroo). There are open marketplaces where sellers can find customers, and “take a cut” again when a transaction is struck (e.g. online retailing like Amazon, eBay). And there are “true platforms” – like cloud

businesses and app stores – which provide a service on top of which other businesses can be built, and monetise in different ways (Microsoft Azure and Amazon Web Services selling cloud space to business users, Apple intermediating between developers and users and taking a commission in certain circumstances, Google Play mostly through advertising and data collection).

2.1 How do models differ?

Ben Thompson of *Stratechery*, a tech/business writer and one of the most perceptive commentators in this space, argues one that one should in fact restrict the “platform” terminology to businesses like Microsoft Windows or its cloud-based successors Azure, or Amazon Web Services, or the App Store, which provide a true “platform” on top of which businesses can be built. He distinguishes platforms in this sense from “internet businesses”, i.e. businesses made possible by the internet, which he describes as *aggregators* (not platforms). In his definition, “aggregators” are business “whose power comes from controlling demand, leaving suppliers no choice but to come on their platform on their terms”. An aggregator often starts by providing “superior discovery” and curation of digital goods, which users value; and “once it has gained some number of end users, suppliers will come onto the aggregator’s platform on the aggregator’s terms. Those additional suppliers then make the aggregator more attractive to more users, which in turn draws more suppliers, in a virtuous cycle. (...) customer acquisition costs decrease over time; marginal customers are attracted to the platform by virtue of the increasing number of suppliers”. Aggregators may thus enjoy winner-take-all effects (“since the value of an aggregator to end users is continually increasing, it is exceedingly difficult for competitors to take away users or win new ones”). [3]

He further draws distinctions between aggregators based around aspects of the business model – for example “*how they procure their supply*” (and therefore what costs they incur for supplier acquisition). The key common feature is the need to build up a user base quickly, to be attractive to suppliers who want to make themselves discoverable, and users who want to be found. In order to scale up rapidly, services need to be free to users to begin with, which favours an advertising-based model. Google and Facebook are described as “super-aggregators” because of their size and their pervasive control over digital advertising – which reinforces and protects their power over users and suppliers.

Business models and monetisation strategies fundamentally matter for understanding incentives and conduct. They are not of course a sufficient criterion to identify concerns in an antitrust context, but help to rationalise how a particular conduct needs to be assessed. Other drivers of conduct that can help map out incentives include the ability to enjoy data economies of scope, for instance, which can generate incentives for excluding and exploiting even complements and counterparties. We need to understand all of this more closely to adapt our models and analyses to map into appropriate antitrust theories of harm.

2.2 What incentives can different business model create?

How digital/internet businesses monetise matters. Understanding business models can inform our analysis of what incentives are at play in each case. None of this is intended to provide a taxonomy of “good/bad” behaviour, but “where the money is made” drives the questions we need to ask, and the direction in which economic analysis needs to be developed.

Advertising-funded models

The “zero price” model on the user side – which is key to developing a user base rapidly and relies almost exclusively on advertising for monetisation – has multiple potentially problematic implications (several of which were examined and confirmed by recent antitrust investigations across Europe):

- It can introduce an important barrier to entry: it is just not possible in a zero price environment for a new entrant to compete at a lower price point while making the necessary investments and going through the required “learning by doing” to compete on quality. While it is possible to compete on other dimensions (e.g. privacy) the loss of price as a lever of competition can increase persistence of market power [4];
- Because the process of data generation and harvesting is so critical in a world of “individualised advertising”, it creates incentives to hoard user data, exploit data without consent, lower privacy settings and preserve its privileged access to data through walled gardens and practices that provide limited/asymmetric access to complementary businesses which contributed to generate the data (e.g. publishers).
- It makes it important to avoid the user base leaking away to businesses which are currently relying on being “found” (i.e. are complements) but could in time challenge their position and become substitutes. This is the classic concern about Google being a “traffic allocator” and being able to harm rivals by means of “diversion of traffic” to itself – through “self preferencing” or “demotion”, as in the Google Shopping or Local cases.
- It can create strong drivers to develop and exploit power in the sale of digital advertising. To the extent that monetisation indeed takes place through advertising, there are powerful incentives to gain control of progressive stages of the ad-tech stack – controlling each level and foreclosing rivals while extracting all the value as intermediaries from the supply and demand side (publishers and advertisers). There are concerns Google and Facebook in particular already have control over the key inputs (user identities and user data), own most of the servers on the demand and supply side, and own the exchanges which run the bulk of real-time auctions that determine which ad should be served up to a user, in a given geolocation, loading a page from a given website. Because of complexity and lack of transparency around auction rules and pricing rules, there are concerns that we may have already failed to spot complex patterns of interrelated conduct which marginalise other intermediaries and extract all value in the chain. Prices to advertisers may be higher as a result (and/or quality lower, though we cannot tell because circulation/impression information is not transparently available) than they would be in a more competitive market (which eventually translates into higher product prices to consumers), while publishers are getting declining share of advertising spend and this may affect the quality of news production.
- It can produce incentives to colonise adjacent markets and pre-empt the growth of rivals in those markets (for instance, “verticals” in search) who could then expand into a challenge in the primary market (for instance, general search). Intuitively, if you can’t use prices to draw users onto your service you have an incentive to take alternative steps (including foreclosure of more efficient complementary services) to prevent users from shifting away and keep them in “your” environment. In Google Android, for instance, Google made its own app store available to OEMs for free pre-installation on Android phones provided they agreed to adopt Google Search as the default pre-installed search engine at all entry points on the device. This pre-empted the ability of alternative search engines to get traction in mobile search, which is now overwhelmingly powered by Google.
- And as suppliers become more dependent on the aggregator to access users, the latter can also impose increasingly controversial / exploitative terms designed to favour itself. Taking Google again as an example, this has included practices like “First Click Free” (whereby Google refused to crawl and make visible on Google Search the sites of publishers who adopted a paywall, unless they agreed to allow for some content to be accessed for free for visitors coming from Google Search – thus allowing Google to benefit via data collection and ad revenue); or AMP (whereby publishers who wanted to appear in the “carousel” at the top of the page

needed to adopt a particular format which favours Google's data collection).

"Platform" models

Proper "platforms" essentially provide environments on which third parties can build their business and expand. They are distinct from aggregators to the extent that they monetise in ways other than advertising (a price for service or a commission on sales) *and* do not typically enjoy the same economies of scope in the use of data (although there are nuances). It is useful to think about both dimensions together, to see how it is not quite so straightforward to allocate platforms into "good/bad" categories, but useful insights can be gained by thinking systematically along these dimensions. Platform power tends to come from controlling the economics of the ecosystems, and in various cases intermediating the relationship between suppliers on the platform, and their customers.

There are in fact multiple models on what is possibly a continuum of permutations.

Perhaps at one end one could place *Microsoft's Azure* cloud business, which is in multiple ways a "real" platform: it monetises by charging enterprise users for its services, and has no known economies of scope in data, because it is not the controller of the data it processes. Indeed data security and control are key to the business model, as the cloud provider is constrained in its access and use of the data as a condition of business by the customer.

Apple's App Store is also a classic platform, with Apple providing intermediation between app developers and users. To the extent that Apple is a hardware provider, making money mostly on hardware, it benefits from lots of attractive complements to that hardware (apps) that make the device more attractive to users. Some developers have argued for some time that the "commission" which Apple charges in some cases (e.g. for digital subscriptions entered into through the App Store) is "too high" (though Apple has defended this as a legitimate way to recoup its significant investment in the store through a "finder's fee" for iPhone customers with high willingness to pay). Questions have started to arise (e.g. with the recent Spotify complaint) around whether Apple's incentives will change in future as it may transition in part away from a hardware seller with a complementary app store, towards more of a service business in its own right, developing its own competing services in areas such as music, payments, TV, gaming and others.

The fundamental business motivation for expanding Apple's own presence in services may well be an effort to differentiate its ecosystem in an increasingly commoditised world in which the App store is no longer unique (but challenged by Google Play and equivalents like WeChat in China for instance). However a material growth of Apple's own presence in services would make more plausible the question of whether the benefit to Apple of having a diverse offering with third party apps that attract users will be mitigated by the opportunity to favour its own services in the same space – possibly changing incentives more in favour of foreclosing competing apps. If device growth was indeed to slow down, and monetisation was to occur much more significantly in the future through services rather than devices, then one can see question could be plausibly raised about whether Apple will have incentives to disadvantage third party apps it may profitably replace in years ahead (this would be akin to be "dynamic leveraging" scenario, in which a platform may want to exclude complements today which it perceives as substitutes to its services in the future). How plausible these stories really are will depend on how demand and technology unfold.

Amazon Marketplace is at the centre of a major storm, which is interesting from an economic perspective because it is so multifaceted, but also because economists do not tend to have a general presumption that vertical integration necessarily creates foreclosure incentives. Amazon is a platform (a marketplace) on which third party

sellers can find buyers, but also has a “first party” business which sells branded and own-branded products. It is thus an integrated retail platform. It has also developed a major network of warehouses and distribution centres (“Fulfilled by Amazon”) which is offered to merchants as an alternative to third-party logistics. On the consumer side, it has introduced a subscription service (“Prime”) which offers faster delivery and over time has been expanded to include services such as music streaming and video. Multiple concerns are expressed around Amazon’s business model:

- One has focused on the extent to which Amazon’s size and economies of scale and scope in distribution have undermined the traditional retail sector (Lina Khan has described this as a form of “predation”), with the narrative also extending to a vision that once Amazon becomes fully entrenched as the go-to platform for online purchases, it will shift from its current customer-centric focus towards “cashing in” – increasing Prime fees, degrading shipping terms, raising retail prices.
- More concretely and immediately, concerns have been raised around the sheer “power” that Amazon can wield, because of its size and “must have” nature as an outlet, on vendors and small merchants that “depend” on it for their visibility and access to consumers. The commission Amazon charges on sales is described as the “Amazon’s tax”, and there are multiple claims of power being exercised towards small merchants in the form of unfair Terms & conditions, charges and requests. The German (and Austrian) antitrust investigations, recently settled, focused on this and ended with commitments to modify certain problematic T&Cs worldwide.
- A major focus of the public discourse (and the US political debate) has been the “dual role” concern: that Amazon is acting at once as the platform operator for the marketplace, and as a seller on its own account, and this generates incentives to “favour itself” and squeeze the merchants or exploit them in various ways. Analogies are also made with a Google Shopping-type mechanism, whereby the ranking of Amazon’s search results on the results page is biased by its algorithm to favour its own products, or favour merchants that make use of Amazon’s “FBA” or “Prime”.

As a matter of first principles, it does not seem inherently problematic for a marketplace operator to be charging a commission on sales (and indeed it is common to others, such as eBay). A marketplace also benefits from the widest possible variety of products being available for sale – and being recognised therefore as the “go-to everything store”. Selling own label products in competition with merchants does not automatically create an incentive to exclude or marginalise them. But while we have traversed similar issues in multiple other contexts (from brick & mortar grocery retailing to broadcasting, where we have considered and modelled the circumstances in which an integrated supplier may want to favour its own content over others), what needs to be worked on is the extent to which these results carry through in an environment with much larger economies of scale and scope, and huge volumes of data.

The “data” piece indeed complicates the analysis significantly: there is uncertainty on the extent to which Amazon is using the data it obtains on sales by third-party sellers (Amazon says it does not), as well as unique data on what products consumers have searched for (“consideration data”), to make business decisions that may benefit itself (and disadvantage third party sellers) – for instance, determining whether it should enter with an Amazon Retail offer for a product already supplied by a 3P Seller. The concern that is being expressed in the public discussion is that Amazon can match and replicate their offers at lower prices – pre-empting sellers and “appropriating” their investment in product innovation. This is indeed a focus of the current investigation by the European Commission. And to complicate matters further, Amazon is growing its advertising business (estimates place it at around one half of Facebook’s US advertising business). While the issues that attach to entirely ad-funded businesses may be some way down the road, concerns have thus been expressed that Amazon might be transmogrifying rapidly into

an ad-funded business. The intersection of the business model (huge economies of scale and scope, use of complementary offers to drive users to the service in various ways), combined with major economies of scope in data use is going to invite significant and complicated scrutiny of Amazon for some time.

What about others? *Netflix, Uber?* The main question about Netflix at this point seems to be whether they could come to represent such a chunk of global demand that they could credibly exercise monopsony power and extract unfair terms for content from content providers. The issue is not new of course – the question of monopsony power and its implications for competition are well understood indeed in content industries facing powerful distributors (eg a monopoly cable). With the internet, however, users can be rapidly accumulated at little to no cost across the globe and power can be potentially wielded on a global scale. So this is another case where our past insights may need to be reviewed.

As to Uber, the internet has made it possible for it to become a global brand, supported by “blitzscaling” entry in multiple geographies. But while there are major benefits to travellers using the service across cities, and for these users the presence of the brand/service over a wide geographic footprint plays a role, the economies of scale and density that matter at the level of the production technology are mostly local: what a competing service needs to achieve to be viable is generally sufficient density in an urban centre, *not across large geographies*. The difficulty here is that in order to *create physical demand quickly*, ridesharing has had to convert users away from their usual modes *and entice* them into using the service quickly; it also had to mobilise a sufficient pool of drivers to serve that demand. To do this, it must offer incentives to both sides and setting prices at which the service is overall loss-making. When then faced with competing entry, the issue is then exacerbated because rivals fight to attract existing demand as well as to expand the market, and this has led to much publicised price wars in multiple regions, mergers and exits. The industry is nowhere in the world near anything resembling an equilibrium. And while persistent loss making raises potential questions of predation, we may be just looking at introductory pricing, and moreover it is very hard to see recoupment as a realistic possibility even after exit – because recent experience (e.g. in Singapore) shows that monopolies tend to be only temporary. The industry is in a tumultuous cycle of entry, funding rounds, price wars, mergers, and as long as there is appetite for continuing to fund these losses it is hard to see this game of musical chairs settling down into some form of reasonable equilibrium.

2.3 Follow the money?

The insight from this discussion is that *monetisation strategies matter*, as ad-funded internet businesses that need to monetise through advertising have strong incentives to adopt conduct that protects and enhances their ability to generate, harvest and exploit user data, to pre-empt rivals from establishing businesses that (while currently complementary) can provide a threat to their data generation engines, and to expand and exploit their power in the monetisation technology (as intermediaries at all levels of the digital advertising supply chain). Business that do not monetise in the same way (but charging for their services, or selling a complement, or taking a cut on third party sales on the platform, or taking a cut on a transaction in which they are match makers) do not generate quite the same incentives.

Of course this is not sufficient to draw distinctions between “good” and “bad” platforms from an antitrust perspective. Monetisation strategy is a key dimension, but features such as *data economies of scope* also play a major role and need to be also understood. There, Google and Facebook clearly see a lot of what their users do; Apple has significant scope economies in data also because they arguably see everything their users do too (but make a point of protecting their privacy more effectively than others); Amazon sees what consumers buy, and some of what they watch. Uber sees where riders go but not much else. Netflix sees what subscribers watch, but again not a great deal else. Microsoft does not see much at all because they sell to enterprises and cannot get

access to individual data. The ability to “see” what users do is important for “swinging” user bases efficiently across to new services and create demand rapidly – but this can in turn create incentives to protect those new businesses by behaving in ways that foreclose or exclude others, degrade privacy standards, etc. And there is a dynamic aspect too, in that business models are evolving (e.g. Apple possibly towards more services, Amazon towards more advertising) and this will blur distinctions relying on original business models.

Getting a handle on these distinctions nonetheless helps steer the economic research that needs to be done to support relevant theories of harm. We do have economic models (and empirical work) on competition on a conventional platform (e.g. broadcasting) between third parties and the integrated platform owner. But we need to update them to a digital context: how do our established insights from other environments carry over to digital? And how does consumer behaviour affect the analysis? The intersection of what we know about the incentives of different business models (advertising, applications, off-line services, hardware), plus behavioural insights on consumers, is the current challenge in the analysis of digital platform. Our models need to be adapted and rewritten using a digital setting and platform terminology. This process has started, but needs much further focus on the part of the academic community.

3. WHAT THEORIES OF HARM?

What theories of harm do we have available that effectively relate to these issues?

Foreclosure is a powerful, well established mechanism which is usually the “go to” enforcement theory in this area. It has a strong pedigree because of the Microsoft case – where Microsoft engaged in anticompetitive tying to protect and leverage its OS monopoly on computers from potential threats materialising in a world of internet and distributed applications. What “made” the story was that there was a credible dynamic threat to Microsoft’s dominant OS being replaced in the future. That said, it cannot be bandied about each time someone (a rival platform, a supplier to a platform who is thus currently a complement) does not make as much money as it would like, or faces competition from an integrated service provided by the platform. There need to be clearly articulated *incentives* to foreclose, and we know these are most powerful when there is a plausible dynamic leveraging story at play (such that it’s not just a bit of market share shift that’s at issue, but the current incumbent is concerned about being replaced in future by a challenger). And there needs to be an *ability* to foreclose: conduct that only affects a rival/complement on one channel but has no effect on other channels is not going to succeed to marginalise and may have other explanations.

A case that fits exactly within this established framework, which is that of the *Microsoft* case, is *Android*: the EC and other regulators concluded there was exclusionary tying/bundling of Google’s Google Play app store with its search functionality, supported by pre-installation and default settings in a way that did not allow rivals to outcompete Google when OEMs chose a search engine for their devices. The motive was strong: with a zero price constraint on one side of the platform, protecting the capability to generate revenues on the advertising side is a strong rationale for repelling all threats and challenges to the “engine” for those revenues – search traffic and attention. There are not that many cases that fit this structure: but when they do, the theory has strong explanatory power.

It is somehow more difficult to see this story fitting in situations in which monetisation occurs differently. For instance in the case of Apple *as long as* the main source of revenues is the sale of devices, and a variety of quality apps available on the App Store helps sell the device, it is unclear why there should be incentives to foreclose a popular desirable app. As long as Apple continues to make most of its money in the sale of devices rather than services, this “possible replacement” story does not ring very true in general. Alternative explanation for charging a

commission to app developers on certain sales can include just charging a “finder’s fee” to apps that “find” “premium” customers with higher willingness to pay, through the App Store; or price discrimination to charge more to higher worth customer who are higher-intensity users of the app in a world in which the price of devices does not change. So (at least for now) it is hard to see dynamic incentives at play here, although this could change if Apple started monetising much more on services than devices.

What about self preferencing? This has been derided by some as “a European aberration” when used in *Google Shopping* – a manifestation of a peculiar European penchant for “fairness” and “protecting competitors”. In practice this is also a way to describe a form of vertical *foreclosure*. For a super-aggregator like Google who has in effect the function of “traffic allocator” over the whole of the internet, conduct that favours its own services (eg by creating a One Box for comparison shopping and failing provide link to competing comparison shopping sites, depriving them of clicks and of advertising revenues; and deliberately demoting rival comparison shopping sites on the SERP) caused significant shifts in traffic, with other traffic sources not able to “fill the gap”, and strong network effects made the denial of traffic to rivals more likely to have persistent foreclosing effects. Similarly in *Google Local* the concern is that Google directs consumers looking for local content to its own local service, while reducing the visibility of other local services. “Self preferencing” has been brought up similarly in the case of Amazon and its “buy box” – with allegation that Amazon favours “itself” in various ways when determining which product “wins” “buy box”. The circumstances of Amazon seem somewhat different however: the issue of “today’s complement being tomorrow’s substitute” that was at play issue with Google (as vertical search engines are a competitive threat to Google’s core general search business) does not seem so much of an issue in the case of Amazon. Google’s business model (free organic traffic and paid clicks) also generated credible static incentives to demote businesses competing for ads, in a way that is not quite true of Amazon where monetisation takes the form of a commission on sales. This all needs to be tested, however.

Overall, **exclusion** is still a very rich seam for theories of harm in this space but they are not all going to be good theories and persuasive.

What about “dual role” theories? i.e. concerns around a “platform” operating a marketplace or a store AND selling simultaneously also its own product in competition with third parties? We need to formulate clearly why we worry about this in the case of digital platforms like Amazon or Apple. We need to extend the analysis of vertical foreclosure stories (that we have dealt with in broadcasting and other context for years) and reformulate them in the digital context – with network effects, economies of scope, data and consumer behaviour. How do the insights of “one monopoly profit” possibly extend to platforms which rely on complements and make a commission on each sale of third-party products?

Critically we need to devote more oxygen to **exploitation/unfair trading stories** – where the concern is that the platform can flex its power by creating various forms of **friction, and imposing terms and conditions on suppliers that they would not otherwise accept but do so because they have no other way of accessing users**. This may well be a form of exploitative abuse unless there is evidence that there are good innocent explanations, and they have not worsened over time. Ultimately though these should be relatively easy to address, with commitments to amend T&C.

What about **commissions charged by a platform on sales** (Amazon’s 15% in the case of third party sellers; Apple’s 30%/15% in the case of in-app sales of subscriptions). Could this be a form of exploitation that we can tackle? But how is one to gauge complaints that these commissions are “excessive”? How does one decide whether a particular level of commission is “excessive”? Can we formulate some criteria, or do we simply say “this

is too difficult, and agencies should not intervene on this basis”? Do we say “it’s a private battle for rents, not a matter for antitrust intervention”? It is certainly hard to opine on a particular level: it could be a form of exercise of market power but it is not excess pricing. How do we think about this?

More thinking needs to go generally towards exploitation as a category of harm. It should not become a catch-all to sidestep showing foreclosure when one cannot quite get there. But this tool needs to be given content and dialled up, because not all the concerns we have take the form of leveraging power in one market to foreclose direct competition in another. Sometimes power is wielded in order to induce e.g. suppliers to adopt practices that benefit the platform but are harmful to suppliers and/or consumers - even if they do not exclude them or are not in danger of foreclosing as such. This is a form of exploitation and it needs to be looked at as such, not “force fit” into a tying case.

But how should we define “exploitative” abuse? A classic way to think about exploitation is “practices that involve *direct* harm to consumers through the imposition of excessive prices/unfair terms of sales/ contractual provisions”. In this definition, exploitative abuse involves *direct consumer harm* and this distinguishes it from exclusion that is about practices leading to foreclosure of *rivals* not based on merit and only *indirectly* to consumer harm (by reducing competition). But “conduct which harms consumers directly” is not enough – we have situations like discrimination on the platform that may not lead to exclusion and yet can distort competition, eventually harming consumers. **One way to do this could be to include “customers” in our definition of “consumers”, and thus include under potential “exploitation” also conduct that harms firms that do not compete directly with the dominant platform but do business on it as complements.** This way, firms that use the dominant platform as “input” would be treated as “consumers”. This seems a good way to go to me, as it would then suggest two categories of “exploitation” mechanisms (aside from excess prices):

- The conduct of the dominant platform *directly restricts consumer choice*;
- Consumers are harmed because the dominant platform’s conduct *biases competition “downstream” among businesses which rely on the platform*. This can lead to a decrease in the intensity of competition and worsening of price/quality and/or simply lead consumers to make suboptimal choices for given levels of prices/qualities.

We can then think of several theories of harm that may fit. We need to look into conduct that amounts to **coercion, e.g. imposing on counterparties practices they would not otherwise adopt but favour one’s own model and business, ultimately distorting competition and damaging consumers.** Key is these concerns are *not* relying on a foreclosure mechanism. A good example here was “First Click Free”: a practice whereby Google requested publishers which adopted a paywall to agree to a number of “free clicks” as a condition for crawling their content and for them to appear on the search page at all. Google benefited because the “free clicks” allowed it to serve up ads to the reader. The publisher which did not comply would not have its content crawled and would be nowhere on the search page. This had the effect of distorting publishers’ choice of business model as between “pay” and “ad funded” in a direction that suited Google – biasing in favour of ad-funded models in a way that most likely did not reflect the underlying preferences of consumers, but also biased the investment in journalism towards lower quality content. The practice was abandoned last year by Google, which sensed this could have become a problem, but the theory was sound and a good example for how an exploitative abuse story could be structured: there was clearly no exclusion (Google did not compete in news with publishers) but there was coercion to adopt FCF (because otherwise a publication would not be crawled and indexed) and more generally pressure to adopt an ad funded model because a hard pay wall just meant no visibility. There was nothing like a foreclosure or a leveraging theory: the evidence was instead that Google was using its market power to distort outcomes in a market in which it was not directly present, entrenching a business model that was beneficial to

itself, but bad for consumers and society and which did not have an efficiency justification. Agencies should be much more open to receiving complaints around this kind of conduct, and be willing to examine them under an “exploitation” banner. The “key ingredient” of the story was the preferences of the dominant platform induces choices that are contrary to consumer interests and translates into a loss of welfare. Other stories may well fit this framework.

Exploitation is also useful in thinking about potential concerns around practices that lead to asymmetric access/hoarding of data. For instance the concern publishers expressed about “accelerated mobile pages” (AMP) has been that Google imposed a particular online publishing format as a condition to appear in the news carousel at the top of the page, as a result of which Google had access to publishers’ data in a way that the publishers themselves did not. In the case of *Amazon* the concern that is being examined is that whether Amazon can “see” its sellers’ data and use them to make informed decisions on product selection and pricing, in a way that may disadvantage and undermine the sellers themselves. This could potentially be a form of exploitation as well.

More generally, the current total mess on the accumulation and exploitation of our data (who gets to obtain it, keep it, combine it, exploit it without our understanding and consent) falls well under a notion of exploitation. Platforms impose conditions (often disguised as technical requirements) to capture data about consumers of suppliers on the platform, to then build a data moat without sharing the data symmetrically with suppliers who contribute to generating it. A reasonable counterfactual should be that a business operating on a platform needs to get full information about the customers it serves and can then use this information to improve its competitive offering. If the platform imposes technical conditions for access to its key input (traffic, visibility, ranking in search) that result in asymmetric access of the business it serves to its own customer information, this is unfair and exploitative. At the very least, why not have a menu of possibilities with the platform being able to access and use data on the business it supports in exchange for a lower commission (versus a higher commission with no access to data, for example).

Misinformation can also feature here. Conduct that distorts/restricts the information available to consumers when choosing between products should be capable of being scrutinised (including discrimination in rankings without objective reasons, and other means of biasing/limiting the information available to consumers, leading to poor consumer choice).

4. SUMMING UP

The message of this paper is first, that the antitrust tool can and should be powered up to deal with concerns in digital space, and we should not be afraid to do so because precedents are scarce or we need to develop economic insights (formally and empirically) to extend to these environments. This requires imagination, research and work, but there is no reason why we should concede ground entirely to regulation.

Second, in order to do so effectively we also need to move swiftly past a view that acronyms like GAFAMs or FANGs capture some meaningful underlying feature. We cannot “read across” concerns about digital “tech giants” without carefully teasing out the incentives that are associated with their different business models. Understanding this can help us map concerns about conduct into credible theories of harm, and clarify why the practices we observe may be more or less likely to have anticompetitive effects in some cases than in others. At a very high level, advertising-funded “super-aggregators” that are free to users raise legitimate questions both around exclusion (because their predominant incentive may well be to colonise and expand in order to protect their position from future threats, and extract larger advertising rents) as well as exploitation (because even in a static

sense, once a position of strength is achieved they wish to extract greater rents). Platforms that rely on businesses being built “on top”, monetising through the sale of devices or commissions, and “match making” platforms, may create less of a concern around exclusion as they may have less of an incentive to exclude complements both statically and dynamically – again as a matter of very first principles. Exploitation is potentially a problem for these too, however, and it is important we develop exploitation as a more accessible and pragmatic tool.

This said, it is of course *not only* about “follow the money”. Monetisation strategies and business models are a key dimension, but only one, of an analysis that needs to consider also the implications for incentives of features like data economies of scope, and how all this intersects with behavioural bias of consumers. But “follow the money” (and “follow the data”) seems a useful starting point.

While this paper is written entirely in a personal capacity and does not reflect the views of CRA or anyone else at CRA, I have benefited from discussions with Fiona Scott Morton in particular, Pierre Regibeau, Philip Marsden, Federico Etro, Oliver Latham and Bob Stillman. For disclosure, I have advised multiple players in this space, including adverse to Google on Android and digital advertising, as well as work for Apple, Amazon, Microsoft, Uber, NewsCorp and others.

Note from the Editors: although the e-Competitions editors are doing their best to build a comprehensive set of the leading EU and national antitrust cases, the completeness of the database cannot be guaranteed. The present foreword seeks to provide readers with a view of the existing trends based primarily on cases reported in e-Competitions. Readers are welcome to bring any other relevant cases to the attention of the editors.

[1] In the US, establishing the Microsoft case of twenty years ago as the high point of enforcement and the way forward still seems very important (e.g. “The Microsoft case (United States v. Microsoft, 253 F.3d 34, D.C. Circuit, 1998) provides the best guide to what constitutes monopolization in a high-tech setting. This case should be encouraging for those in favor of antitrust action against the tech titans. Microsoft was found to have monopolized the market for operating systems for personal computers, based on conduct that excluded the Netscape browser and Java software, which together might have facilitated entry and thus eroded the monopoly power of Microsoft Windows.” (Carl Shapiro, forthcoming *Journal of Economic Perspectives*, 20 May 2019)).

[2] See Etro, F. and Caffarra, C. “On the economics of the Android case”, *European Competition Journal* 2018. See also Choi, J.P., and Jeon, D.S, ‘A leverage theory of tying in two-sided markets.’ 2016. Mimeo. De Cornière, A., and Taylor, G., ‘Upstream Bundling and Leverage of Market Power.’ 2017. Mimeo. Toulouse School of Economics 2018.

[3] Thompson, *Stratechery* 23 May 2019: “Google can literally be a search engine for the entire world. Facebook can literally be a social network for the entire world. Netflix can literally be the entertainment destination for the entire world. Moreover, each of these companies can “know” end users in a way that was never previously possible: Google can give all of its billions of users the exact content they want (and ads), Facebook can create a personalized feed for all of its billions of users (and ads), Netflix can collect money every month from 150 million people around the world”. “This is absolutely astounding, and something that Carnegie and Rockefeller and any other

would be monopolist throughout history could not even fathom". See <https://stratechery.com/2019/the-problem-with-aggregation-theory-demand-at-scale-supplier-power-and-value/> ↗

[4] While experiments have been made to introduce negative pricing on the user side of ad-funded businesses (e.g. Microsoft's launch of a rewards program for its Bing search engine), these efforts have not been successful.