ANTITRUST AND UPSTREAM PLATFORM POWER PLAYS – A POLICY IN BED WITH PROCRUSTES

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Abstract

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Ubiquitous digital platforms are fundamentally altering our ways of life. Competition policy-makers, though, are on edge. Among the many issues they are considering, one matter has remained under-appreciated: "upstream" effects. Powerful platforms, consensus has it, are now (or inevitably will be) marshalling our digital markets. They have apparently also found new ways to decimate competition and harm our wallets, menu options, privacy and autonomy. But while antirust academics are furiously debating how best to address such consumer concerns, policy-makers are also reacting to worries expressed by another group of stakeholders, namely (allegedly) victimized *suppliers* – app developers, merchants, drivers, couriers (etc.), as well as dependent content providers (like Spotify or Yelp), without whom the powerful platforms would have little to attract consumers.

This thesis, then, is about antitrust and its application to such "upstream" concerns. Prosaically: are upstream platform power plays really relevant antitrust problems? The answer would certainly be quite obvious if contemporary (pre-platform) antitrust theory and practice were anything to go by. Supplier-side anxieties have indeed been all but written off the policy agenda for the brick-and-mortar economy. Moreover, academic consensus still has it that provider interests cannot be the touchstone of antitrust. Today, though, policy-maker attitudes seem to be shifting. Inasmuch as antitrust is the envisaged response, we need a policy introspection to make some sense of what is going on.

To this end, the analysis offered here is altogether normative, theoretical and practical. Normative because it engages in a supplier-mindful soul-searching exercise, which advances our understanding of antitrust's foundations; theoretical as it sheds evidence-based insights on upstream effects and develops new frameworks for rationalizing them; practical since it takes a deep dive into the complex antitrust machinery and reveals how "looking up" exacerbates key difficulties that have long been the source of occasional seize ups.

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Abbreviations

ABA	American Bar Association
ACCC	Australian Competition and Consumer Commission (competition authority (AU))
ACM	Autoriteit Consument & Markt (competition authority (NL))
AdC	Autoridade de Concorrência (competition authority (PT))
ADLC	Autorité de la concurrence (competition authority (FR))
AG	Advocate General
AI	Artificial intelligence
AMT	Amazon Mechanical Turk
ARCEP	Autorité de Régulation des Communications Électroniques et des Postes (Regulatory Authority for Electronic Communications, Postal and Print media distribution (FR))
BEUC	Bureau Européens des Unions de Consommateurs (European Bureau of Consumer Unions)
BKA	Bundeskartellamt (competition authority (DE))
BMWi	Bundesministerium für Wirtschaft und Energie (Federal Ministry for Economic Affairs and Energy (DE))
BRICS Centre	Brazil, Russia, India, China & South Africa Competition Law and Policy Centre
BWB	Bundeswettbewerbsbehörde (competition authority (AT))
CADE	Conselho Administrativo de Defesa Econômica (competition authority (BR))
CCI	Competition Commission of India (competition authority (IN))
CFREU	Charter of Fundamental Rights of the European Union
CGE	Conseil Général de l'Économie (General Council for the Economy (FR))
CJEU	Court of Justice of the European Union
CMA	Competition and Markets Authority (competition authority (UK))
CNNum	Conseil National du Numérique (National Digital Council (FR))
CRA	Credit rating agency
DCMSC	Digital, Culture, Media and Sport Committee (UK)
DoJ	Department of Justice (competition authority (US))
EC	European Commission (competition authority (EU))
ECN	European Competition Network
EOp	Equality of opportunity
ESEC	Economic, Social and Environmental Council (FR)

ESMA	European Securities and Market Authority
FCC	Federal Communications Commission (US)
FTC	Federal Trade Commission (competition authority (US))
GCEU	General Court of the European Union
GWB	Gesetz gegen Wettbewerbsbeschränkungen (Act against Restraints of Competition)
HoL	House of Lords (UK)
ICN	International Competition Network
IGF	Inspection Générale des Finances (Inspectorate-General for Finances (FR))
IMF	International Monetary Fund
IO	Industrial Organization
IP	Intellectual property
JFTC	Japan Fair Trade Commission (competition authority (JP))
MMO	Massively Multiplayer Online
NCA	National Competition Authority
OFT	Office of Fair Trading (former competition authority (UK))
OS	Operating System
OTA	Online Travel Agent
RPG	Role-playing game
RSB	Regulatory Scrutiny Board
SBP	Superior bargaining power
SCOTUS	Supreme Court of the United States
SMPT	Single monopoly profit theorem
Stigler Committee	Stigler Committee on Digital Platforms
Study Group	Study Group on Improvement of Trading Environment surrounding Digital Platforms (JP)
TEU	Treaty on the European Union
TFEU	Treaty on the Functioning of the European Union
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
US	United States

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INTRODUCTION: SETTING THE SCENE

In the mid-1990s, Bill Gates (the founder of Microsoft) echoed what many others "in the know" had already prophesized: the commercial internet was going to bring us 'friction-free capitalism.'[1] The expectation at the time was that the "information superhighway", as they were calling it, would 'extend the electronic marketplace and make it the ultimate go-between, the universal middleman.'[2] Widespread disintermediation was the promise. And another, perhaps even more enticing one, doubled it: freedom, especially in the market. After all, the original internet design was biased in favour of decentralized power.[3] The commercial internet, in short, was supposed to herald what *Wired* magazine co-founder, Kevin Kelly, described as disintermediated 'swarm capitalism',[4] which he thought would climax into 'a thousand points of wealth'.[5]

Of course, things did not pan out exactly as planned. Far from killing the middleman, the internet became a breeding ground for a particular species of intermediaries. Prescient minds of the 1990s spoke of "cybermediaries";[6] today, we refer to them as "digital platforms" (hereinafter "platforms"). These middlemen are not only ubiquitous; they are also fundamentally altering the way we produce, consume, work, interact, and even think.

Consider how societies behaved during the first wave of the covid-19 pandemic that swept across the world in the spring of 2020. How did confined consumers satisfy their need for things like information, basic necessities, ready-made meals,

1 Gates (1995) ch 8.
2 ibid.
3 *See* Benkler [2016] 18, 18-20.
4 Kelly (1998) 159.
5 ibid 156.
6 Sarkar, Butler and Steinfield [1995] 0.

entertainment, and social contact? By trusting Google,[7] hoarding on Amazon,[8] eating in with Uber and Deliveroo,[9] binge-watching content on Netflix and YouTube,[10] and chatting through Facebook-owned services.[11] Platforms, it seems, were the consumer's go-to answer, even more so than before the crisis hit. Likewise, where did white-collar employees turn to when they were told to keep working? Video-conferencing platforms like Zoom or Microsoft's Teams.[12] Ditto for students and their teachers encouraged to rely on the Google Classroom and Apple Teacher platforms for lessons.[13] And what about governments? Those wary of the disease curve reached out to Apple and Alphabet (the parent company of Google) to help them develop official tracing apps. Why? Because apps must be interoperable with, and widely available on, two sets of key platform infrastructures, which both these firms control: their respective mobile operating systems (OS) and app stores.[14]

So much for disintermediation then. What about decentralized power? Until the mid-2000s, digital markets did live up to the hype. Things were happening fast and furious; swarms of entrepreneurs were tapping into internet-enabled opportunities and the pockets of venture capitalists as if there was no tomorrow. To be sure, some of them did become big, sparking fears of monopolization – remember Yahoo,[15] AOL,[16] or MySpace?[17] However, none enjoyed what Nobel economist John Hicks called 'the best of all monopoly profits', namely 'a quiet life.'[18] As predicted, digital markets during

7 *See* Sterling (2020).
8 *See* Wakabayashi and others (2020).
9 *See* Abril (2020).
10 *See* Koeze and Popper (2020).
11 *See* Swartz (2020).
12 *See* Koeze and Popper (2020).
13 *See* Scheiber, Schwartz and Hsu (2020).
14 *See* Apple (2020).
15 *See* Stross (1998).
16 *See* Salkowski (2000).
17 *See* Keegan (2007).
18 Hicks [1935] 1, 8.

this period had 'no center, no orbits, no certainty.'[19]

Fast forward to today, though, and the mood has soured. By most accounts, centralizing pathogens have infected our digital markets. The press has collectively labelled them as the "Big Tech" platforms;[20] business and finance insiders use acronyms like "GAFA(M)" or "FAANG". These monikers refer to platform firms – Amazon, Apple, Alphabet/Google, Facebook, (Microsoft), and Netflix – which have all been described as powerful monopolists. Some would also add Uber and Airbnb to this mix.[21] Paradoxically, the playbook for online success has not really changed over the years: borrow to fund loss-making ventures now with the promise of "winner-takes-all-or-most" prosperity tomorrow.[22] The only difference between the AOLs of the 1990s and the current crop of large platforms is that the former fell into oblivion within five years of ascending to market dominance. Yet, the prevailing sentiment is that today's 'tech giants […] are here to stay and continuing to grow in power and influence.'[23] Actually, Eric Schmidt (ex-CEO and executive chairman of Alphabet/Google) believes they are 'even more powerful than most people realize'.[24]

This thesis, then, pertains to powerful platforms. More specifically, it probes how they (allegedly) exert their power against a specific group of stakeholders: suppliers. Before going into more details, though, we need to understand how we got here.

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19 Kelly (1998) 9.
20 *See* eg The Economist (2018).
21 *See* eg Rahman [2018] 1621, 1676.
22 *See* Kenney and Zysman [2019] 35.
23 Harvard Business Review (2020) 1.
24 Cohen and Schmidt (2013) introductory ch.

Section 1. The new dynamics

A) Platformization

Platforms are everywhere. Policy-makers see them as key drivers of the 'digital remapping of the world'[25] ushering the so-called "Fourth Industrial Revolution".[26] Some even say platformization of our global societies is 'irreversible'[27] because 'any industry in which information is an important ingredient is a candidate for the platform revolution.'[28] In hindsight, this is perhaps not so surprising; the idea that the internet would kill intermediaries – dubbed the "threatened intermediaries" hypothesis – rested on faulty assumptions. Middlemen do not all perform a single unified service (ie "coordination") and the internet was not going to affect every conceivable situation of exchange in the same way.[29] The "network of networks" (as it was also called in its formative years) undeniably did disrupt many analogue-era intermediaries by dramatically lowering costs – ask the music, book, movie, and news publishers; but "friction-free capitalism" was a pipe dream. Trust issues, search and transaction costs, as well as moral hazard and adverse selection risks were bound to emerge in novel forms and impede seamless interactions between consumers and producers. These are things middlemen have always stepped in to alleviate.[30] This reality coupled with other technological (r)evolutions[31] made the internet's transformation into a 'network of platforms'[32] inevitable.[33] That it would morph into what some describe as a '"corporate

25 BMWi (2017) 14.
26 *See* JFTC (2019) 5. *See* also UNCTAD (2019b) ch 2; OECD (2017) chs 1-2.
27 Study Group (2018) 1. *See* also McAfee and Brynjolfsson (2017) 205.
28 Parker, Van Alstyne and Choudary (2016) 3.
29 *See* Schmitz [2000] 0.
30 *See* Spulber (1999).
31 Namely, the World Wide Web, quantum leaps in computer processing and programming languages, as well as the advent of broadband, cloud computing, and modern AI.
32 Greenstein (2012) 15.
33 *See* Spulber [2019] 159; Evans and Schmalensee (2016) ch 4.

monopoly"',[34] however, came as a surprise to most observers.

B) Platform "monopolies"

Media coverage of popular platforms is undoubtedly trigger-happy in its literal and sometimes metaphorical reliance on the monopoly label.[35] None of those targeted by the descriptor are textbook monopolists – firms with absolute control over properly defined markets. Nevertheless, monopoly is a question of degree.[36] And by one metric – concentration – "Big Tech" platforms do fit the profile.

Concentration tells us whether an industry is populated by many players or is instead dominated by one or a few. Obviously, the picture it conveys is only as good as one's delineation of the market is accurate and methodology for computing market shares is robust. Amazon, for instance, might dominate online retail but it certainly has not cornered retail in general. This notwithstanding, detailed work by competition authorities, expert-driven high-level assessments and more anecdotal accounts of concentration in digital markets provide a useful canvas for our introductory purposes.[37] For what this body of evidence suggests is that global concentration is rife in many digital industries and has been so for years.

As is commonly accepted, online search is dominated by Alphabet/Google;[38] social media by Facebook;[39] digital advertising by Alphabet/Google and Facebook,[40] OS and app stores by Apple and Alphabet/Google,[41] and online marketplaces by

34 Vigna (2019) quoting media scholar Christian Fuchs.
35 *See* references in Auer and Petit [2019] 99, 100-102.
36 *See* Lerner [1934] 157 (n 2).
37 For a condensed review of 33 reports, *see* Appendix A.
38 *See* Appendix A.
39 ibid.
40 ibid.
41 ibid. *See* also *Google Android* (Case AT.40,099) European Commission Decision 18 July 2018, paras 442-460.

Amazon.[42] Besides, it is not just the usual suspects. Take online travel agency in the US and Europe: Booking Holdings and Expedia[43] (whose respective portfolios cover nearly all the most popular booking platforms) have long controlled this industry.[44] Similarly, platforms like Alibaba in China; Rakuten in Japan; Flipkart in India; MercadoLibre in Mexico; Lazada in several Southeast Asian nations (such as Singapore); Jumia in multiple Eastern and Western African countries (such as Nigeria and Kenya); and Souq in the Middle East, have all been said to either durably dominate or share market leadership with Amazon in the online marketplace space.[45] Even industries like music streaming, online food delivery and ride-hailing that were extremely vibrant only a few years ago are experiencing rapid consolidation around the world. Many believe each will eventually "tip" for good in favour of one or two firms.[46]

Yet, why is this happening, one may ask? An emerging consensus points to a simple explanation: digital markets display multiple features which, while not novel individually, are coinciding at such an unprecedented scale that very high and durable concentration becomes the likely outcome.

Some of these characteristics boil down to traditional economics: digital products (be they goods or services) are information products. As such, they can be very cheaply *re*produced and (thanks to the internet) distributed, although initial production costs may be exorbitant. Unit costs can thereby be almost inversely proportional to the number of customers served. This means digital markets will typically exhibit extreme returns to scale, giving an important competitive advantage

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42 *See* Furman and others (2019) paras 1.56-1.59; UNCTAD (2019b) 84.

43 *See* Schegg (2018) 4; Phocuswright Research (2019); dealroom.co (2016).

44 Think of Booking.com, priceline.com, agoda.com, KAYAK, Rentalcars.com and OpenTable (for Booking Holdings), as well as Expedia, Hotels.com, Orbitz, Travelocity, Hotwire and Wotif (for Expedia).

45 *See* UNCTAD (2019b) 40.

46 *See* eg Smichowski [2018] 43 (ride-hailing); Marino-Nachison (2019) (music streaming); Bradshaw (2020) (food delivery).

to incumbents. Furthermore, many digital products – say, online search results – are "experience goods" (ie their quality can only be ascertained upon usage), which increase the value of trusted brands and create switching costs for existing consumers. Economies of scope and learning effects can therefore also be generated by expanding the product range – think of Alphabet/Google and its myriad branded offers.

A powerful demand-side factor crucially further compounds these supply-side features: network effects. Again, nothing revolutionary per se since economists have known for years that certain products become more valuable to those who use them as the number of consumers grows.[47] These externalities, however, are particularly prevalent and important in digital markets where they can sometimes arise in all their forms. Take Facebook's eponymous social media platform for illustrative purposes. As a consumer, the service becomes a more worthwhile tool for social engagement and connection the more others sign up. Economists speak of a (positive) *direct* network effect. There is also an *indirect* externality at play because as the number of Facebook consumers increases so too does demand for compatible complementary products (think of other differentiated social media like Instagram or publisher websites). Finally, the more consumers join Facebook, the more advertisers will be willing to subsidize their usage by buying advertising space on the platform infrastructure. Here, we have a special case of indirect network effects which reflects the fact that Facebook is what economists call a *multi-sided* platform, ie a platform which directly connects distinct and interdependent customer groups (in this case, consumers and advertisers).[48] The network effects arising from these interactions are thus more properly denoted as *multi-sided* or *cross-sided*.[49] Beyond terminology, though, the important thing to

47 *See* Katz and Shapiro [1985] 424.

48 The literature generally refers to "two-sided" platforms, although many platforms have more sides.

49 *See* Graef (2016) 22.

remember is that (positive) network effects are key drivers of concentration in digital markets. For there comes a point when it makes little sense for new users not to join the biggest platform that enjoys a "more-users-equals-more-value" dynamic. Network effects can thus create a virtuous cycle for those that benefit from them and may constitute an almost insurmountable obstacle for rivals.

Several other catalysers of monopolistic tendencies in digital markets are also worth mentioning briefly. The first two are technological. Nowadays, digital businesses can relentlessly gather on the cheap vast amounts of varied data, which they can then exploit by leveraging quantum leaps in AI-driven analytics to continuously improve their products and processes. Together, "big data" and "big analytics" potentially exacerbate the impact of demand and supply-side returns to scale and scope.

The remaining factors are more miscellaneous. Think of switching costs, disincentives to multi-home (ie the ability to engage with several platforms simultaneously), better access to financing and superior attractiveness for sought-after workers.

In short, this is the new conventional wisdom: the internet is no longer the dynamic environment it once was because the arteries of cyberspace are now prone to becoming durably clogged up by entrenched monopolists or oligopolists.

But how worried should we be? As concentrated as our digital markets may be, liberal democracies (at least those modelled on the US and the EU) have not chosen to condemn "endogenous" monopolies as such.[50] The baseline – reflected in the 'rules of the market order'[51] which govern private economic interactions – is rather that such concentration (even to the point of absolute monopoly) is tolerable, sometimes

50 That is, monopolies not acquired through merger, which definitely would be caught by merger control laws in many cases.

51 Brennan and Buchanan (1985) 12.

desirable, so long as it mirrors the type of competition we want to see. This is one of the most central tenets of our antitrust laws.[52] Even in the extreme scenario where a market cannot viably support multiple players – what economists call a natural monopoly – we accept it and impose ex-ante *restrictions on what the monopolist can do*. Accordingly, the real question is: are the big platforms misbehaving? – are there, for the purposes of this thesis at least, "competition problems" ripe for *antitrust* intervention?[53] Here, things get messy.

C) "Competition" problems?

To say that platform practices are dividing the antitrust community severely understates the situation. Reflecting the Zeitgeist of our polarized politics, accounts are indeed often strikingly antagonistic. One side is damningly critical. Scorn is heaped on the GAFA(M), which are accused of decimating competition or squelching it in the bud. More specifically, fears of excessive hoarding of valuable consumer data,[54] wasteful behavioural and near-perfect price discrimination,[55] and "killer acquisitions"[56] are routinely conjured nowadays. So too are revisited concerns about how rivals of "Big Tech" may be foreclosed.[57] Together, they underscore the myriad ways in which the consumer's wallet, menu options, privacy and autonomy could be harmed.[58] Worse still, these platforms may be hurting us as citizens by compromising the fulcrums of our liberal democracies because of their ability to shape public perceptions and

52 *See* Auer and Petit [2019] 99, 102ff (usefully summarizing the statutory and jurisprudential bases for the tenet).

53 I will use "antitrust" and "competition policy" interchangeably to refer to those instruments societies have endowed themselves with to control ex-post the business practices of economic entities in the name of competition.

54 *See* Stucke and Grunes (2016).

55 *See* Ezrachi and Stucke (2016) 83-143.

56 *See* Kamepalli, Rajan and Zingales (2020).

57 *See* eg Scott Morton and Dinielli (2020a) 17ff and (2020b) 24ff; Baker (2019) ch 7.

58 *See* Lynskey (2018).

opinions.[59] In sum, critics fret over the idea that a few big platforms have turned "BAADD" (ie 'too big, anti-competitive, addictive and destructive to democracy').[60]

Proponents, by contrast, decry a cabal against what they see as efficiency machines. Platforms are more altruistic consumer attendants than rent-seekers, harvesting and analysing personal data to facilitate new forms of contract and to continuously improve upon the cornucopia of tailor-made and inexpensive services they offer.[61] To be sure, some advocates do acknowledge the concentration which seems to prevail in many platform markets. But they are also quick to dismiss the suggestion that this reality reflects the existence of economic power, let alone a winner-takes-all-or-most interplay.[62] The digital economy, they claim, 'is rife with competition and innovation, and consumers are benefitting in meaningful and remarkable ways from dynamic rivalry among companies big and small.'[63]

What emerges from these contrasting canvases is difficult to reconcile. Yet, the optimists are correct about at least one thing: 'there is undoubtedly more research to do.'[64] Paradoxically, though, policy-makers have been quick to make up their minds.

Dozens of reports – produced by competition agencies, commissioned by them, or authored by policy experts – have been published in recent years. Of the 33 reviewed for this thesis, 24 clearly suggest that antitrust-relevant issues are endemic.[65] Most also conclude that urgent intervention is required.[66] Europe, as is well known, has been at the forefront of these efforts. Antitrust actions at both EU- and Member State-level have

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59 Concerns connecting platforms to fake news are particularly illustrative (*see* eg Kanter and Kressin (2017) 23).
60 The Economist (2018).
61 *See* eg Varian [2020] (forthcoming) and Parker, Van Alstyne and Choudary (2016).
62 *See* eg Barnet and others (2020); Evans (2017); Sokol and Ma [2017] 43.
63 Barnet and others (2020) 4.
64 ibid.
65 *See* Appendix A.
66 ibid.

either already been taken or are in the pipelines against the GAFA. The European Commission (EC) has even mooted the need for a new competition tool (which would tackle structural competition problems beyond the reach of antitrust) and detailed platform-specific ex-ante regulation.[67] Outside Europe, countries like Australia, Japan and India have been similarly proactive; even in the US, where authorities were slow on the uptake, powerful platforms are now poised to face their day of antitrust reckoning.[68]

Policy-makers and antitrust decision-makers have effectively decided to side-step academia's internal rifts. More compellingly still, they are doing so while considering, among other matters, an issue – often without identifying it as such – whose full breadth only a handful of scholars have explicitly called attention to, namely "upstream" effects.[69] Therein lies the crux of this thesis.

Section 2. The need to "look up"

A) Platforms' discontents

If one were to survey stakeholders about the state of the platform economy, what picture might emerge? Super-platform firms (ie "Big Tech") would almost certainly be sitting pretty comfortably. Amidst the worst economic downturn since World War II, they have actually managed to get bigger.[70]

Covid-19 will have obviously been less kind to other powerful platform operators like the online travel agent (OTA) duopoly[71] and the Ubers of the world.[72]

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67 *See* EC press release (IP/20/977).
68 For regular updates, *see* Panettieri (2020).
69 *See* eg Stucke and Ezrachi (2017) (16.
70 *See* Wigglesworth (2020).
71 *See* eg Hayhurst (2020).
72 *See* eg Lee (2020).

They will probably bounce back, though, albeit in slimmer versions of their former selves.[73] If they do not, the pandemic will have likely wiped out their respective industries entirely.

Small(er) rivals – the Bings and eBays of the world – will naturally bemoan their misfortunes, perhaps even blame the dominant platforms for them, much like they were before the crisis hit. However, these actors are not our focus here.

What about consumers? Platform practices will surely alarm those of us who value privacy and sustainability. Yet, studies show that many consumers seemingly prize the likes of Facebook and Amazon too much to really care.[74]

There remains, then, one category of stakeholders. It regroups the merchants on Amazon's Marketplace or Rakuten; the hoteliers on Booking.com or Expedia; the developers on the Apple App Store or the Google Play Store; the advertisers and content providers on Google Search or Facebook; the music publishers on Spotify or Apple Music; the drivers, riders, and labourers on the Ubers, Deliveroos, and Amazon Mechanical Turks of the world; as well as countless others who, paradoxically, are sometimes themselves platform operators like Spotify (on app stores) or Yelp (on general search engines).[75] Business scholars refer to all of them as "complementors";[76] let us call them (platform-) providers or suppliers.

From a value chain perspective, they are the ones who sit upstream of the

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73 *See* eg Syme (2020); Queensland University of Technology (2020).

74 *See* Mosquera and others [2020] 575 (finding that one week of Facebook was worth $67 to participating consumers); Masters (2019) (reporting findings of a Feedvisor study showing how reliant consumers are on Amazon).

75 Of course, firms like Spotify and Yelp are attracting increasing attention in antitrust cenacles because they also compete with the in-house services of "Big Tech" platforms (like Apple Music or Google Local+). But this horizontal aspect deflects attention from the vertical linkage between these businesses, which is how they actually envision their relationship with "Big Tech" platforms (*see* CMA (2020b) para 3.47).

76 *See* eg Gawer and Cusumano (2014) 654.

platforms.[77] Without them, the latter would have very little to attract consumers.[78] This is precisely why platform operators often refer to them as "partners",[79] which is what platform capitalism was supposed to be: mutually beneficial trades. Platforms would take the products of suppliers and capture some of their value but only after having enlarged the size of the pie. In exchange for a middleman's cut, they promised to foster new opportunities for many individuals and businesses alike. The former would find an escape from the dysfunctions of their local labour markets and earn a living in highly flexible and autonomous work environments; the latter would gain the ability to "scale without mass" to reach a global audience.[80]

Now, nobody is saying platform capitalism was a sham from the outset. Nor could we, as (almost) everyone recognizes the tremendous benefits platforms do generate.[81] In fact, in the early years, the system did seem capable of living up to its positive-sum hype. Uber drivers, for instance, always hark back to the "good old days".[82] But over the past decade, providers have been voicing their sense of disillusionment. Powerful platforms – not only the GAFA(M) mind you – have become predators, they argue, sometimes even parasites; States should intervene, including and especially, by enforcing antitrust.

Provider pleas for help have not fallen on deaf ears. Almost all earlier-mentioned reports display an explicit concern for the plight of platform-suppliers.[83] And many highlight a perceived unfairness in the distribution of value.[84] The EC, for

77 *See* Allen and Flores (2013) 11. *See* also CMA (2020b) para 3.47.
78 *See* Parker, Van Alstyne and Choudary (2016) 40 (arguing that a platform's value 'starts with the creation of a *value unit* by the producer').
79 *See* eg Denissen (2020); Uber (2020); Booking Holding (2020) 2-3.
80 *See* eg Einav, Farronato and Levin [2016] 615; McAfee and Brynjolfsson (2017) 177-199 and 252-277.
81 cf Levine (2011).
82 *See* Sainato (2019).
83 *See* Appendix B.
84 ibid.

instance, has even tried to put a number on the identified "value gap". It estimated that providers who rely on multi-sided B2C platforms could be missing out on as much as €15.85 billion annually due to powerful platform mischiefs.[85] According to the EU Executive, the latter also bear significant responsibility for the €9.47 billion net revenue loss news publishers suffered between 2010 and 2014.[86] Many policy-makers and antitrust decision-makers have, moreover, found that skewed value distribution is not necessarily a consequence of platforms exerting *market* power; other forms of power are at play, especially superior bargaining power indicative of provider-side economic dependency.[87]

So, platform capitalism promised to create a "thousand points of wealth". Yet, today, it rather seems to be bringing about brazenly settled platform monopolists, somewhat content consumers, and visibly short-changed suppliers.

Some (perhaps many) of us will, of course, be alarmed. Who wouldn't feel empathy for the mom-and-pop merchants struggling to attract consumers on Amazon's plethoric marketplace; the small hoteliers trying to salvage their businesses through Booking.com; or the Uber "partners" driving themselves to exhaustion for below-minimum-wage-level "fees" to make ends meet; all of whom allege platform abuses?

There are countless stories of how powerful platform firms mistreat the providers who enabled them to become so valuable in the first place. That policy-makers have taken notice surely ought to be applauded; as John Maynard Keynes warned in 1933, this kind of capitalism 'is not intelligent, it is not beautiful, it is not just, it is not virtuous'.[88]

Still, what some policy-makers (including antitrust decision-makers) are

85 EC SWD(2018) 28.
86 EC SWD(2016) 156, 160.
87 *See* infra ch 6.
88 Keynes [1933] 177, 183.

suggesting – that these are *competition* problems and that *antitrust* should play a key role in redressing them – is striking. For these types of worries have been on the back burner for years, and in some respects, for decades. As symptomatic of an undefined policy problem as they may be, then, are upstream platform power plays really relevant antitrust problems?

This is the question I intend to address along with some of the key queries nested within it. Indeed, if antitrust enforcement is potentially warranted, what might be the reasons, can they be rigorously articulated, and when would they make sense? Furthermore, even if intervention is justifiable, can the policy be usefully deployed? If so, should it? And if not, why not?

The list is fairly ambitious. Nevertheless, while complex, the central issue these questions all trace back to – namely, the "upstream" – is fundamentally familiar; powerful platforms only cast it in a new light but have the merit of forcing us to stop tiptoeing around it. Let us briefly elaborate on this and outline where we are going with the thesis.

B) Antitrust as a relevant policy response?

In 2019, Elizabeth Warren (the former US presidential hopeful) chastised Amazon for behaving in a way that erodes the profits of small businesses who rely on the firm's marketplace platform to reach consumers. Why the scorn, though, especially since her preferred remedy would be an antitrust-mandated breakup of Amazon? '[I]t's not fair',[89] was her tweeted reply.

Powerful platforms assuredly have made antitrust 'cool'[90] and 'sexy again.'[91]

89 Warren (2019).
90 Weiner (2018).
91 Shapiro [2018] 714, 714.

But there is nothing new about this sort of rhetoric. The Sherman Act of 1890 – America's original competition statute – was actually enacted on such producerist inclinations.[92] The only difference is that suppliers calling for protection at the time were small dealers victimized by the powerful railroad trusts. What has changed since then, however, is that antitrust in the US (but also around the world) has taken a technocratic turn which has left supplier-side issues essentially purged from the purview of decision-makers.

Farmers, for instance, are still being exploited; just no longer by the industrial "robber barons", but by powerful processors and food manufacturers who are themselves squeezed by big grocers like Walmart and Tesco. Yet, as a small contingent of competition lawyers has noted, upstream concerns in the brick-and-mortar world have only received scant attention under contemporary antitrust theory and practice.[93] Furthermore, firms like McDonald's are still charting their way to bigness by minutely controlling businesses and labour suppliers in ways which skirt both the labour and antitrust laws… as they were in the 1950s when the organizational innovation known as franchising came into prominence. Back then, though, antitrust decision-makers would have had something to say on what is simply an alternative path to centralized vertical control.[94]

The fact that, today, policy-makers and antitrust decision-makers appear to be "looking up" speaks volumes about the importance of platforms in our socio-economy and the political saliency surrounding anything they do. For there can be no denying that for many years now – roughly four and two decades in the US and the EU respectively – the antitrust community has tended to "look down" to make sure

92 *See* Peritz (2000) ch 1.

93 *See* Carstensen (2017) (taking a mainly US perspective); Anchustegui (2017) (taking an EU perspective).

94 Callaci (2019) ch 1.

consumers are getting the best possible deals, rather than up at the plight of those who sit upstream in any given value chain.

At the same time, even most centrist and progressive scholars reject the idea of making supplier interests the touchstone of antitrust.[95] So, what does this reveal of the attitude our decision-makers are now adopting? Inasmuch as antitrust is the envisaged response, we need a policy introspection to make some sense of what is going on – precisely what this thesis offers to do.

One aspect of the exercise follows from an argument made by some platform critics who say antitrust must shift lodestars to correct its contemporary disregard for the suffering of (platform-) providers. Put differently, the claim affirms (or at least suggests) that antitrust's current goal is inherently insensitive to upstream effects.[96] This call for soul-searching is met in Part I. There, two chapters explore the only two available options if the policy is to remain connected to the one thing everyone agrees it should relate to, namely "competition".

Another element of the introspection pertains to how and when upstream platform power plays can be rationalized as antitrust-relevant competition problems. Platform apologists have criticized decision-makers, accusing them of skirting the issues.[97] Likewise, they have lambasted academics championing the cause of platform-suppliers for being sketchy.[98] The three chapters that make up Part II take these charges seriously by attempting to rationalize specific concerns voiced by (allegedly) victimized providers.

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95 *See* eg Thomas (2018) 307 ('[w]hile the prevention of consumer harm can legitimately be considered as at least one of the goals of antitrust law, it would not be convincing to say the same about "supplier harm".'); Kirkwood [2015] 358, 361 ('the overarching goal should be consumer welfare, not supplier welfare'). *See* also Carstensen (2017) 24 ('no scholar seems to advocate that producer welfare should be a primary goal of competition policy.')

96 *See* eg Steinbaum and Stucke [2019] 595, 600.

97 *See* eg Barnet and others (2020).

98 *See* eg Sokol [2020] 1259, 1261-1262.

Finally, there is the question whether antitrust is really the appropriate answer to our upstream worries. The two chapters comprising Part III address this matter through two angles: firstly, by seizing up the key cogs of the antitrust machinery, ie its enforcement standards, power radar and remedial apparatus; then by reflecting on other ways provider interests can be safeguarded.

In so doing, this thesis makes three broad arguments, which ultimately point to a Procrustean dilemma.

One: changing antitrust's lodestar may be desirable, but it is not a prerequisite for looking upstream. We will see that there is nothing inherent to antitrust's contemporary objective which would render provider fears invisible to decision-makers. The real problem with the current set-up is that it is deceptive and, more importantly, supported by potentially questionable normative foundations which should be (re)discussed. All the more so since the only viable alternative – one that respects the idea that antitrust is about competition but not providers per se – does have worthy normative credentials, which are more directly connected to the upstream. Shifting to it should, accordingly, be on the table.

Two: upstream platform power plays can be formally made out as potential competition problems under either approach to antitrust, but there are important caveats that create a conundrum for enforcers. As will be explained, the technocratic route has pitfalls making erroneous conclusions more likely. Yet, while shifting lodestars would enable decision-makers to rigorously rationalize intervention in a wider array of cases, doing so would mean recognizing that antitrust is a moral enterprise just as much as it is an economic one. This is not a proposition many in the establishment would deem enticing. Paradoxically, we will further see how certain situations can be made out as potential competition problems even when they stir anxieties pertaining primarily to

things beyond antitrust's normative remit.

Three: antitrust can redress our upstream worries. However, it will be demonstrated that (moderate) effectiveness often comes with a price liberal democracies should think twice about paying, especially given the other available policy levers at our disposal, including the option of new regulation.

C) Caveats

The scene is now set, save for a few refinements on terminology, scope and methodology.

Regarding terminology, a few words need to be devoted to the notion of "platforms". References to Netflix and (to a certain extent) Spotify will have surprised some. For they would point to industrial organization (IO) economists who define platforms as intermediaries that match distinct, but interdependent buyers and sellers whose mutually benefitting direct interactions generate cross-sided network externalities, which the "platform" must then internalize to sustain its value proposition. From this perspective, Netflix is admittedly not a platform because it is not *multi-sided*.[99]

Multi-sided market economics has important implications which we cannot ignore. Four reasons nevertheless lead me to reject its definition of platforms here.

Firstly, economists often butt heads over whether a firm is "multi-sided".[100]

Secondly, multi-sidedness (however conceived) is not necessarily immutable as businesses can strategically shift to a one-sided model and vice versa.[101]

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99 Content providers and consumers do not interact *directly* like they do on YouTube – interactions via Netflix are indirect since consumers do not actually deal with content providers who instead license their content to Netflix.

100 *See* Auer and Petit [2015] 426, 432-436.

101 *See* similarly Belleflamme and Peitz (2018a) 287-289.

Thirdly, this thesis is really about antitrust and its treatment of "upstream" effects. It would thus be odd to foreclose from the discussion suppliers who rely on intermediaries that are generally viewed as platforms (such as Uber or Amazon's retailing arm) but do not fit the IO economist's specifications.

Fourthly, the latter ignore insights from other potentially relevant disciplines that display a more technological understanding of the concept, conjuring ideas of an infrastructure which users can build upon.[102]

Here, platforms – digital unless otherwise specified – are hence seen as intermediaries that operate a (digital) product (hereinafter the platform "infrastructure", "system", "architecture" or "product") through which they facilitate and organize interactions between consumers and providers/suppliers (together, the "users") which generate network effects.

Turning to scope, the focus will be on business-to-consumer e-commerce platforms and a limited array of their alleged upstream mischiefs for reasons of manageability.

Finally, two remarks on methodology. First, despite the ambition to cast a light on the global nature of the issues at hand, there will be a tendency to draw primarily from European and, to a lesser degree, American experiences, sources and materials. This bias should not be overly crippling, though. Europe has been at the vanguard when it comes to the matters discussed herein. And both the EU and the US have established antitrust frameworks which the rest of the world look to for inspiration.

Second, the thesis is resolutely multidisciplinary, drawing insights from lawyers, economists, business scholars, digital ethnographers and, perhaps most significantly, from political philosophers. Indeed, a by-product of the arguments

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102 *See* eg de Reuver, Sørensen and Basole [2017] 124, 126.

advanced herein is that the sole viable alternative approach to the way we currently think about antitrust is one which can only be rigorously articulated if political philosophy is embraced. With this ambition, however, comes inevitable risks of oversimplification. The straitjacket created by institutional word constraints further exacerbates them. I am aware of these challenges and have made every effort to mitigate their impact and caveat my analysis and claims where necessary.

With all the foregoing in mind, let us now begin.

PART I. SOUL-SEARCHING

Antitrust, in many jurisdictions, is a policy which has come to be betrothed to a singular aim. Margrethe Vestager – antitrust's most renowned contemporary enforcer-in-chief – aptly captured its ethos when she stated that her 'job is – as it always has been – to make sure consumers are treated fairly'[1] '[b]ecause competition policy isn't there to […] help one company, and hold back another. It's there to defend consumers.'[2]

Needless to say, the argument that maximizing (or, more correctly, protecting) "consumer welfare" not only is, but should be, antitrust's primary (if not sole) purpose, was relatively uncontroversial until recently. Powerful platforms have been game changers. Their rise, combined with increasing industry concentration throughout the (mainly US) economy,[3] has reignited a fierce debate about what our competition laws should strive to achieve. And while initially confined to the US, this issue rapidly caught fire across the Atlantic,[4] made its way to global fora,[5] and even boiled over beyond academic cenacles into politics and the popular agenda.[6]

Why the controversy? The short answer is that, for many observers, antitrust has 'lost its mojo'[7] and the consumer welfare lodestar is to blame.

Now, it is widely accepted that contemporary antitrust has been (perhaps overly) short-termist and price-centric in its focus. Some have claimed (or at least suggested)

1 Vestager (2016c).
2 Vestager (2016b). *See* Sokol (2019) 285 (rejoicing at the singular focus on consumer welfare 'most jurisdictions have adopted').
3 *See* Philippon (2019).
4 *See* Ezrachi (2018); Gerbrandy [2019] 127.
5 *See* eg 'OECD Global Forum on Competition Discusses Competition Under Fire' (2019) (discussing the alleged 'inadequacy of the consumer welfare standard').
6 *See* eg Edelman (2020) (discussing the highly publicised "Big Tech" congressional hearing of July 2020).
7 Osti [2015] 221, 222.

that this proves consumer welfare-minded antitrust simply *cannot* "look up".[8] The solution, then, must be radical; address the problem like a neuro-ophthalmologist would treat a patient with tumour-induced Parinaud syndrome:[9] *remove* the underlying condition.

Others, however, have argued that the remedy overshoots; reconstructive (as opposed to ablational) surgery is surely enough (if at all needed) because the consumer welfare lodestar is not *inherently* conducive to upgaze paresis.[10]

This is the backdrop for Chapter 1. As will be explained, there is much more to "consumer welfare" than meets the technocratic eye. Yet, focusing on its myopic application obscures what may ultimately prove to be a deeper problem: potentially questionable *foundations*, which our concern for platform-providers only exacerbates. The conclusion, therefore, is an invitation to openly (re)discuss the lodestar's normativity.

But suppose the antitrust community heeds the call and ultimately does find consumer welfare to be normatively irreparable. Towards what should we then redirect antitrust? Remember, we want the policy to be sensitive to upstream worries; yet, consensus has it that supplier interests cannot themselves be the touchstone. Plus, competition law must still be about competition. Given these considerations, there is really only one alternative lodestar antitrust can justifiably further: competition, *as such*.

Granted, the claim has nothing revolutionary in it. Some American scholars – the so-called "Neo-Brandeisians" (after the Progressive era champion of US antitrust enforcement, SCOTUS Justice Louis Brandeis) – argue that this lodestar already guided

8 *See* notably Steinbaum and Stucke [2019] 595, 600.
9 A condition whose main symptom is "upgaze paresis", the inability to look up.
10 *See* notably Caves and Singer [2018] 395.

decision-makers during earlier years.[11] And in the EU, protecting the competitive process has, until recently at least, always been considered paramount by the Union judicature – it seemingly still is for the GCEU, mind you.[12]

The problem one might flag, though, is that since we are discussing goals, we need normative foundations; an axiomatic account cannot suffice because there is nothing self-evident about "competition". This is our task in Chapter 2, which offers a normative theory of the "competitive process" lodestar that also explains why provider anxieties must be *directly* catered to.

Tangentially, one comes to appreciate how the "goal(s)" debate, which our upstream concerns have further fuelled, is really an ethical battle over the value of competition. Should societies desire competition for its outcomes or because it is a process in itself worthy of protection?

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11 Wu (2018) Concluding ch. *See* also Steinbaum and Stucke [2019] 595; Khan [2017] 712, 743ff.

12 cf Cases C-6/72 *Continental Can* ECLI:EU:C:1973:22 [1973] ECR 215, paras 22-26; T-105/17 *HSBC* ECLI:EU:T:2019:675 [2019] electronic Reports of Cases, para 65; with Case C-413-14 P *Intel* ECLI:EU:C:2017:632 [2017] not yet published. For a similar reading, *see* Petit [2018] 728, 739-742. But cf Behrens (2018) 16.

CHAPTER 1. "CONSUMER WELFARE": ANTITRUST'S CONSEQUENTIALIST TURN

Introduction

The history of antitrust so far has a "Kuhnian" feel to it, at least in mature jurisdictions; it seemingly develops in stages, much like Thomas Kuhn understood the process of scientific evolution. That is, a ruling framework (or "paradigm") dominates the way the discipline is theorized and practised; inevitable shortcomings creep up over the years; and when these flaws become untenable, a crisis emerges, sometimes sparking an exceptional "paradigm shift".[1]

Take the US and the EU: conventional historical narratives tie turning points in decisional attitudes with revolutions in the marketplace of (economic) ideas where, in our modern times, the (Post-) Chicago School views have come to prevail.[2] And, as is well known, these ideas – whether based on price theory or contemporary game theory – are all about consumer welfare.

The consumer welfare paradigm assuredly never did receive unanimous approval.[3] Yet, its dominance has also never been so seriously challenged. Powerful platforms and their upstream exertions are a big reason why. As suggested earlier, though, critics advocating for a paradigm *shift* have not convinced everyone. Proponents of the status quo or of a less radical fix have been quick to counter that (part of) the argument for change emphasizes what is really a *practical* defect in the

1 Kuhn (1962).

2 Naturally, these narratives need to be contrasted with counter-historical accounts. *See* eg Giocoli [2009] 747; Schweitzer and Patel (2013).

3 *See* eg Bernhard [1967] 1099, 1129-1163.

consumer welfare lodestar which does not fundamentally enfeeble it.[4] Their retort is not unfounded. As Parts II and III of this thesis will respectively show, our upstream anxieties *can* be rationalized as competition problems under the current approach; shifting to the alternative only makes it *potentially easier* for decision-makers to intervene. In brief, "looking up" in the platform economy does not necessarily require us to abandon consumer welfare as a lodestar. If a paradigm change truly is needed due to the incumbent's feebleness, it must accordingly be shown that the weakness is *normative*. What follows thus examines whether ammunitions for such an argument exist and how our concern for the upstream may fit in it.

To this end, Section 1 starts with some conceptual clarifications. Over half a century's worth of scholarly accounts on the consumer welfare paradigm have failed to produce terminological consistency. Even the latest, platform-infused, ones suggest confusion over the substance of what is really a polymorphic ideal. Having clarified the different forms "consumer welfare" may take and what each variation substantively entails, Section 2 then looks at the paradigm's foundations for potential weaknesses. Moreover, it examines whether, and if so how, our interest for the plight of platform-providers might exacerbate such potential flaws where they exist.

Section 1. "Consumer welfare": a polymorphic ideal

"Consumer welfare", as a concept, entered the lexicon of competition lawyers through the early writings of the late Robert Bork and became a mainstay following the 1978 publication of his *magnum opus, The Antitrust Paradox*.[5] Bork's works have had an enduring impact on generations of scholars, practitioners and judges alike within and

4 *See* Melamed and Petit [2019] 741, 750 (arguing that 'the problems that critics have identified are practical, not legal or conceptual; and abandoning the CW standard will not solve them.')

5 Bork (1978).

beyond the US. But the consumer welfare notion he originally depicted has morphed. So much so that several proxies now coexist, each encapsulating somewhat distinct and potentially conflicting policy implications that have little resemblance with what Bork himself envisioned. To avoid confusion, the following briefly clarifies the Borkian understanding of consumer welfare (A), before identifying its various offshoots (B). Section 2 then places each of them under the normative microscope.

A) Borkian consumer welfare

Few have appreciated (or explicitly acknowledged) the true intention behind Bork's expounding of US antitrust laws as enshrining a consumer welfare prescription in which '[c]onsumer welfare […] is merely another term for the wealth of the nation.'[6] This is because he was appealing to the mainstream (ie neoclassical) economist's understanding of the concept. Here, the reader will hopefully forgive a slight digression which shall prove useful later.

Economists have always wanted to decipher how to allocate scarce resources so that maximum welfare for individuals in society may be achieved.[7] For policy-advising purposes, however, it is important to understand the methodological steps orthodoxy has them make.

- "Welfare" as "wealth"

Firstly, the mainstream economist adopts an understanding of "welfare" which does not mesh well with the layperson's. Even most philosophers would denounce it. More on this shortly; for now, suffice it to note that welfare effectively means "wealth", reflected

6 Bork (1978) 90. Those who do include, among others, Werden [2014] 713, 718-723; Orbach [2010] 133, 138-141 *juncto* 148-149; Schweitzer (2010) 515-516.

7 For detailed accounts on what follows, *see* eg Just, Hueth and Schmitz (2004); Feldman (2008).

by "monetary surplus".[8]

- Economy-wide or within-market welfare

Secondly, there are two distinct analytical frameworks for appraising the welfare effects of actions. One is *general* equilibrium analysis. This is essentially a multi-market approach which considers the economy in its entirety.[9] The other is *partial* equilibrium analysis. Here, the economist focuses on an isolated part of the economy known as the "market".[10] The antitrust lawyer will perhaps be partial to the latter given the entrenchment of market definition in the practice of competition law. It is important to see, though, that the two methods entail different implications. Indeed, an action's welfare effects in a specific market do not necessarily correspond to changes across markets and throughout the economy. Theoretically, therefore, we might say that proper economic *welfare* analysis is conducted under *general* equilibrium. *Partial* equilibrium, by contrast, is really but a limited *surplus* analysis which, under certain conditions, will reflect welfare predictions in general equilibrium.[11]

- Benchmarks for evaluation

Thirdly, there are two alternative theoretical benchmarks orthodox economists rely on for policy-advising purposes. The first is called Pareto-optimality. This is an ideal end-state where economic welfare is mathematically found to be maximized because no further changes to the state of affairs would be capable of improving anyone's welfare

8 A consumer's surplus is the difference between what (s)he is willing to pay for a product and the price (s)he actually pays. Similarly, producer surplus is the difference between the price (s)he actually receives for the relevant product and the minimum amount (s)he is willing to accept in order to maintain the same level of supply. By adding up their respective surpluses one obtains total (social or aggregate) surplus.

9 For a useful historical description of early general equilibrium theory, *see* Walker (2003).

10 Economists do not ignore other market variables but simply take them as constant.

11 Werden (2011) 12, provides a useful synthesis of the economic literature explaining these conditions.

without simultaneously decreasing that of someone else.[12] Of course, it says nothing about how policy-makers should do policy. Economists accordingly refer to the (strong) Pareto principle (or Pareto-superior criterion), which enables the ranking or comparison of alternative states of affairs. By this standard, state B is superior (or more allocatively efficient or welfare-enhancing) when compared to state A if moving to the former improves the welfare of at least one individual without adversely affecting the welfare of anyone else.[13]

The second benchmark is a weaker form of allocative efficiency known as Kaldor-Hicks efficiency.[14] The differing policy implications between the two standards are easily explained. The first rejects any change resulting in at least one loser; the second, by contrast, accepts such an outcome, provided that winners can *hypothetically* compensate the losers.[15]

- The "consumer" in consumer welfare

Finally, neoclassical economists profess neutrality in policy-advising. Effectively, they reject the idea of making value judgements between members of society – for instance between consumers and producers, or between consumers in different markets; their concern usually pertains to the welfare consequences of actions on *society as a whole*. The term "consumer" is hence really a proxy for "buyer". And this notion embodies any member of society engaged in consumptive activities. As a result, "consumer welfare" is a misnomer seldom used in economics because it depicts the welfare of *society*.[16]

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12 Feldman (2008) 3. For a discussion, *see* Blaug [2007] 185.
13 Just, Hueth and Schmitz (2004) 15.
14 Wight [2017] 15, 15ff. *See* also Kerber (2009) 101-104.
15 *See* Just, Hueth and Schmitz (2004) 32-38.
16 Werden (2011) 13.

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To summarize, for the mainstream (ie neoclassical) economist, "consumer welfare" thus theoretically means *general* equilibrium *social* (total or aggregate) *welfare* where Patero-efficiency is achieved. But because multi-market analysis is difficult and the Pareto benchmark is so restrictive, "consumer welfare", in practice, is *partial* equilibrium *social* (total or aggregate) *surplus* where Kaldor-Hicks efficiency is realized.

With this in mind, one can now appreciate why many have misconstrued Bork's *normative* claim. Most contemporary commentators interpret Bork's association of consumer welfare with "the wealth of a nation" as an endorsement of *partial* equilibrium total surplus[17] or consumer surplus,[18] and are, ergo, critical of his seemingly misleading labelling.[19] However, it is precisely this reference – combined with his understanding of 'consumers as a collectivity'[20] and of competition as an end-state in which Pareto-optimality is achieved[21] – that reveal Bork's normative affinity for *general* equilibrium total *welfare*.[22] Much of the confusion presumably stems from his vernacular choices. Yet, as a result, "consumer welfare" rhetoric has mushroomed, embracing several semantic variations and substantive content.

B) The offshoots of Borkian consumer welfare

1. Total surplus

One widely supported alternative to (general equilibrium) total welfare as a goal for

17 *See* eg Ahdar [2002] 341, 348-349.

18 *See* eg Wu (2018) ch 4.

19 Some commentators have also mistakenly understood Bork as referring to the 'welfare of individual consumers' (eg Brietzke [1979] 403, 410).

20 Bork (1978) 110.

21 ibid 51 (giving his preferred definition of competition as 'any state of affairs in which consumer welfare cannot be increased by moving to an alternate state of affairs through judicial decree.')

22 As Werden [2014] 713, 718-723, explains, this interpretation is also consistent with Bork's earlier writings.

antitrust is (partial equilibrium) total surplus, which is normatively connected to Kaldor-Hicks efficiency. Under this approach, the anticompetitive character of a business practice only becomes apparent if overall efficiency declines or is likely to decrease in a properly defined market. Distributional effects, though, are ignored. Briefly,[23] its proponents – which is to say most economists[24] and many lawyers[25] – defend it on the conviction of its economic and philosophical superiority,[26] assumed objectivity,[27] and on the unwavering belief that non-efficiency considerations are either irrelevant or better dealt with through other policy levers.[28] It is argued, furthermore, that any other approach would not only entail significant "welfare" sacrifices,[29] but would likewise be impracticable,[30] generate considerable error and regulation costs, and ultimately compromise legal certainty.[31] In a nutshell, antitrust should thus be 'completely technocratic'[32] and rely on static partial equilibrium models to target only those practices for which there are no redeeming efficiencies.[33]

2. (Strong) Consumer surplus

A somewhat related variation of the "consumer welfare" paradigm is consumer surplus. This one seems to have cemented its place as the dominant proxy for consumer welfare in antitrust discourse.[34] Colloquially translated as the 'direct and explicit economic benefits received by the consumers of a particular product as measured by its price and

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23 Some arguments are deliberately simplified here. Section 2 addresses them more thoroughly.

24 *See* inter alia Motta (2004) 22; Farrell and Katz [2006] 3, 9-12; Heyer [2006] 29; Carlton [2007] 155, 156-159; Rey (2008) 24.

25 eg Kaplow (2012) 3-26; Posner (2001) 9-32.

26 Posner (1981) 88-115; Rule and Meyer [1988] 677.

27 Nachbar [2013] 57, 64 (suggesting that one of the major benefits of a total surplus standard lies in the alleged commensurability of economic effects).

28 eg Brennan [2018] 49, 54-64.

29 eg Kaplow and Shavell [2001] 961, 971; Sokol [2015] 1247, 1249.

30 eg Nazzini (2011) 15-47.

31 eg Blair and Sokol [2013] 2497, 2505.

32 Sokol [2015] 1247, 1265.

33 *See* Posner (2001) 23 (positing that Kaldor-Hicks efficiency is probably the only component of social welfare that antitrust laws can do much to promote).

34 *See* Werden (2011) 14.

quality',[35] consumer surplus can be theoretically grounded in neoclassical price theory.[36] For, following price theoretic models, both consumer surplus and total surplus will be equally maximized in the competitive equilibrium.

Under this approach, antitrust focuses primarily on consumers by relying on static models to target market power exertions that are likely to increase consumer prices or reduce output in a relevant market.[37] Here is where the earlier-mentioned gripe over short-termism and price-centricity kicks in. It reveals little, though, about why the "consumer welfare" paradigm might be normatively defective; nor does it explain why (platform-) providers warrant antitrust protection. Besides, a stronger version of the consumer surplus aim, which (supposedly) moves beyond price and output effects to include things like choice, variety and innovation, exists anyway.[38] That the latter might be impracticable is assuredly a debilitating flaw, one which will become apparent throughout Parts II and III of this thesis. Impracticability is nonetheless not a marker of normative feebleness.

Interestingly, advocates of (strong) consumer surplus are not a united group when it comes to defending both lodestars. Some argue that they are about efficiency (or administrative simplicity);[39] others invoke fairness grounds, distributive[40] or corrective.[41] There are even a few who justify their support on political economy considerations.[42]

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35 Brodley [1987] 1020, 1033.

36 *See* Van den Bergh (2017) 95-97; Drexl (2011) 317.

37 *See* Van den Bergh (2017) 95-96; Van Rompuy (2012) 48.

38 "Supposedly" since price has generally been used a proxy in economic scholarship and antitrust analysis (*see* Van den Bergh (2017) 98; Kaplow and Shapiro (2007) 1080).

39 *See* eg Areeda and Hovenkamp (1978) paras 111, 114a-c.

40 *See* Pittman [2007] 205, 207-215; Ahdar [2002] 341, 344-351.

41 *See* eg Kirkwood and Lande (2008) 90-104; Kirkwood [2008] 191, 197-201; Salop [2010] 336, 350-351.

42 It has been suggested that the consumer surplus standard would be politically more palatable (*see* Baarsma [2011] 559, 571). Moreover, some economists who express their normative

3. Consumer choice/sovereignty

The final "consumer welfare" offshoot is framed in terms of "consumer choice". Proponents describe it as 'the state of affairs where the consumer has the power to define his or her own wants and the ability to satisfy these wants at competitive prices'.[43] This approach purports to go beyond the alleged narrowness inherent to neoclassical economic models. How? By bolstering the analysis with the ultimate aim of ensuring an optimal degree of options for consumers.[44] Much like its siblings, however, consumer choice is not to be confused with a '"social and political values" paradigm […] which [would arguably be] standardless and unduly hostile to business'.[45] In practice, antitrust intervention would thereby be warranted whenever an activity (i) 'unreasonably restricts the totality of price and nonprice choices that would otherwise have been available',[46] or (ii) 'harmfully and significantly limits the range of choices that the free market, absent the restraints being challenged, would have provided.'[47]

According to its proponents,[48] consumer choice should be the objective 'because it asks the right question':[49] "what do consumers want from the market?", to which the answer (they say) is not merely competitive prices, but options.

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preference for total surplus suggest using a consumer surplus approach because the latter may, in practice, be more successful at achieving the real desired end (*see* infra (n 88)).

43 Lande [2001] 503, 503. Lande also advances – without distinguishing it from the notion of "consumer choice" – the concept of "consumer sovereignty". The latter is defined as 'the set of societal arrangements that causes that economy to act primarily in response to the aggregate signals of consumer demand, rather than in response to government directives or the preferences of individual businesses' (Averitt and Lande [1997] 713, 715).

44 Averitt and Lande [2007] 175, 18 (emphasizing that the approach requires neither maximizing the number of options, nor the creation of new options). Though the distinction between consumer choice and extended consumer surplus is hard to make out, it seems to lie in the former's willingness to take non-price parameters (like innovation) (even) more seriously.

45 ibid 177.

46 ibid 182.

47 ibid 184.

48 Beyond Averitt and Lande, these would include, among others, Nihoul [2012] 55; Rosch (2010).

49 Averitt and Lande [2007] 175, 178.

C) Summation

In sum, "consumer welfare" means different things to different people.[50] Nevertheless, they would all agree that this paradigm can accommodate our upstream worries, yet only indirectly; only when abusing providers is also inefficient or harms other consumer interests.

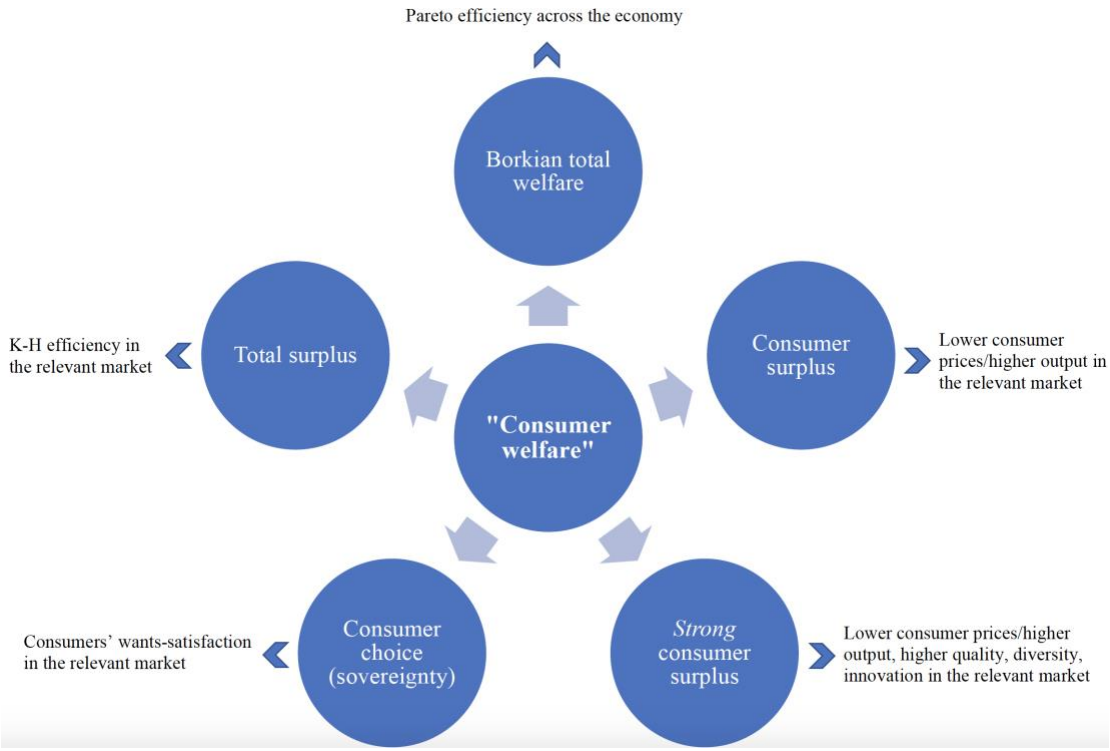

Figure 1.1 *Antitrust's "consumer welfare" paradigm*

Section 2. Appraising the normativity of "consumer welfare"

Having clarified what "consumer welfare" can entail, let us take a more critical look at each of its avatars. Remember, though, that the ambition here is not to conclusively demonstrate that the "consumer welfare" lodestar *is* normatively defective. It is rather to show that there are ammunitions for such an argument and to explain how our

[50] *See* Figure 1.1 for a summary.

platform-provider anxieties may contribute to it. That being recalled, let us begin with total welfare.

A) Total welfare

From the outset, the question whether economic welfare (ie Paretian efficiency) should guide antitrust appears to be a moot one so it will not be dwelled on for very long. Pushed to its logical conclusion, antitrust steered by this approach would implode because there will seldom be a Pareto-efficient business practice (ie one that does not adversely affect the welfare of anyone).[51] Facebook, for instance, could implement changes to its newsfeed that might objectively benefit every stakeholder involved – say advertisers, news publishers, and consumers – except Twitter, whose attractiveness might suffer. Yet, assuming Facebook is a monopolist, intervention might be warranted, although by most accounts, this is competition *at its best*. And if it is antitrust enforcement itself which must be Pareto-efficient, then the goal is synonymous with radical *laissez-faire*.

Incidentally, proper *welfare* analysis, we just saw, requires the general equilibrium framework. As Bork himself recognized at the time – another reason why many misinterpret his *normative* claim – economists still struggle to model welfare effects of business practices across (all) markets.[52] Notwithstanding further potential objections to Pareto efficiency,[53] advocating for any standard of economic welfare as an antitrust objective therefore seems rather problematic. The policy cannot aim to maximize (or protect) welfare because its current methodology simply cannot account

51 Sullivan [1974] 1214, 1219-1220. *See* also Posner (2014) 14-15.

52 *See* Bork (1978) 115. *See* also Perrot (2009) 133; Hammer [2000] 849, 853-859.

53 Such as those voiced by liberal rights proponents like Sen [1970] 152. *See* also the discussion below on total surplus.

for welfare analysis.[54]

B) Total surplus

Unlike (general equilibrium) total welfare, (partial equilibrium) total surplus (or Kaldor-Hicks efficiency) is consistent with the tools of contemporary antitrust. What's more, this avatar can, albeit indirectly, accommodate the claims of those worried about the plight of platform-providers. For example, a change in the way Uber's algorithm matches drivers and consumers might reduce drivers' surplus more than it increases the wealth of consumers. This aggregate efficiency narrative, however, diverts the attention from the fact that "efficiency" is a normative construction. Its foundation is a utilitarian – thus consequentialist (or outcome-based) – ethical defence of a particular understanding of economic competition.[55] And here, there are at least three potential weaknesses.[56]

The first, which pertains to the vexed issue of redistribution, is the weakest in my view (1). The second is stronger and relates to a problematic conflation of concepts (2). The third is probably the strongest as it rejects a purely consequentialist outlook. Following this objection, competition is valuable *as such*, which entails *direct* consideration for the plight of platform-providers (instead of indirect attention under any understanding of "consumer welfare"). Since it is effectively an argument for the

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54 *See* Orbach [2010] 133, 160 ('using goals [such as consumer welfare] that suggest that antitrust somehow engages in direct welfare optimization is confusing and misleading.') *See* also Sullivan [1974] 1214, 1219-1222 ('allocative efficiency is useless as a guide to antitrust policy.')

55 Utilitarianism falls in the broader category of teleological ethics known as *consequentialism*, which expresses the normative view that the rightness of actions must be evaluated exclusively in light of their consequences. This contrasts with *deontology*, which says that some choices cannot be justified by their effects (*see* Sinnott-Armstrong (2015) 8). As observed by Wight, the normative dimension of efficiency is something microeconomic textbooks rarely discuss openly (Wight [2017] 15, 15ff).

56 For a list of other objections, *see* Lianos (2013a) 9-16.

alternative paradigm, the last demurral is bracketed until the next chapter.

1. Wealth redistribution

The total welfare objective (ie Pareto efficiency) would not tolerate any balancing of positive and negative impacts of firm behaviour. The total surplus lodestar, by contrast, is agnostic to redistributive effects between economic agents.[57] This could be problematic. Indeed, whereas many may deem the ethical premise of Pareto efficiency broadly acceptable – recall, nobody should lose – one cannot say the same for the Kaldor-Hicks variation. My guess is few democratic majorities would countenance, even implicitly, a competition policy which allows for (hypothetically compensated)[58] reductions in their wealth merely because the gains of others outweigh their losses.[59] There is surely something "unfair" here.

Should *antitrust* be concerned, though? Consensus would say "no": antitrust is too blunt for wealth redistribution; let other policy levers with better discriminating capacities (like taxation and subsidy schemes) do the job.[60] This is a good point. Still, some would counter-argue that such a response 'can only conceal, firstly, that markets always have an effect on distribution; secondly, that the distributive effects depend on the initial distribution of wealth in society […]; and, thirdly, that the efficiency criterion cannot offer a conclusive measurement for social value of market results in a given situation.'[61] Wealth redistribution, nevertheless, *cannot* guide antitrust, not *directly* at

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57 Though some have argued that Kaldor-Hicks efficiency is actually biased in favour of those with income and market power (eg Veljanovski [1981] 5, 12).

58 Even the most illustrious welfare economists recognize that compensation rarely occurs in practice (*see* Hicks [1939] 696, 71).

59 Similarly, *see* Zimmer (2011a) 77; Kerber (2009) 104; Drexl (2011) 316. cf Posner (1981) 96-98), arguing that Kaldor-Hicks efficiency (which he initially distinguished from wealth maximization before acknowledging their synonymy) is ethically defendable because uncompensated losers assumedly consent *implicitly* to such an outcome by entering the market.

60 Kaplow (2012) 8-16; Farrell and Katz [2006] 3, 11-12; Nazzini (2011). *See* also Devlin and Peixoto [2008] 225, 272-278 (supporting redistribution through private mechanisms (eg profit-sharing plans and stock markets), rather than public ones).

61 Drexl (2011) 315.

least. The reason is epistemic, not practical. Wealth redistribution relates to a dimension of fairness which is alien to the process of competition itself. More on this in the next chapter.

2. Welfare as "monetary surplus"

The second possible flaw of the Kaldor-Hicks efficiency lodestar[62] is its association with the idea of "welfare", understood in its technocratic, rather than demotic sense. As alluded to in Section 1, mainstream economists have a particular conception of the notion. While some may criticize its impoverished content, it is the underlying explanation that is somewhat unconvincing. Let me briefly unpack it.

Welfare, as laypersons perceive it, can probably be synonymized with "well-being".[63] "Welfare as well-being", regrettably, is amorphous, which is a problem for policy-making purposes. At this point, the neoclassical economist borrows from the utilitarian philosopher the concept of "utility", a term generally used as a proxy for satisfaction and happiness.[64] For those adamant on associating welfare with other dimensions, the total surplus lodestar is perhaps already normatively crippled beyond repair.[65] Let us nevertheless dig deeper since mainstream economists take another step to ground this variation of the "consumer welfare" paradigm. More specifically, they further reduce the idea of welfare by equating utility with a rational person's expressed preferences. Why? For "scientific" reasons. Unlike happiness and satisfaction, which are subjective, difficult to measure objectively and probably impossible to compare across individuals, someone's choices can be numerically represented and ordered within a mathematical function that enables such comparisons. Once this second

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62 What follows also applies to Pareto efficiency.
63 Similarly, *see* Hovenkamp [1990] 63, 69; Horton [2013] 823, 850.
64 Just, Hueth and Schmitz (2004) 3-4.
65 *See* eg Makris [2014] 30, 35.

conceptual reduction is achieved, the neoclassical economist can then advise our antitrust decision-maker. But it is important to note how the advice is formed. Due to methodological limitations, the models used to rationalize competition problems will often be based, or premised, on a conception of competition called "perfect competition".[66] As is well known, though, the only thing perfect about this depiction is that it makes the math stick; how many markets actually fit the description of a polypoly of anonymous, rational, wealth-maximizing price-takers, where there is no uncertainty nor innovation?

To summarize,[67] for mainstream economists, welfare means utility minus its eudaimonistic content, which is replaced by a revealed-preference metric, usually money (ie surplus). This thinned-down conception of welfare is then deployed to model static effects of practices against the Kaldor-Hicks efficiency benchmark in a controlled context where an unrealistic understanding of competition is used either as the baseline or as a first-step premise. Accepting total surplus-centric antitrust hence entails endorsing the idea that the policy should be grounded in what can only be described as a "constrained utilitarian" defence of a peculiar vision of competition.[68] Antitrust aimed at protecting wealth using mathematically precise tools in more or less realistic settings.

To be sure, some may have no problems with this. However, my point is that here is a potential normative shortcoming which needs to at least be (re)discussed, not ignored because the goal's apparent scientificity is assumed to be a marker of normative superiority.

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66 Models either use perfect competition as the baseline or as a premise from which some assumptions are then relaxed to build a setting of imperfect competition to deal with monopoly, duopoly, oligopoly, information asymmetries, product differentiation, etc. *See* eg Belleflamme and Peitz (2015) 41-104. Admittedly, there have been efforts to upend this approach by using a game-theoretic rationale to build imperfect competition endogenously. In these models, perfect competition becomes a degenerate form of competition. For further explanations, *see* Berta, Julien and Tricou [2012] 7, 13-15.

67 *See* also Figure 1.2.

68 *See* Veljanovski [1981] 5, 8.

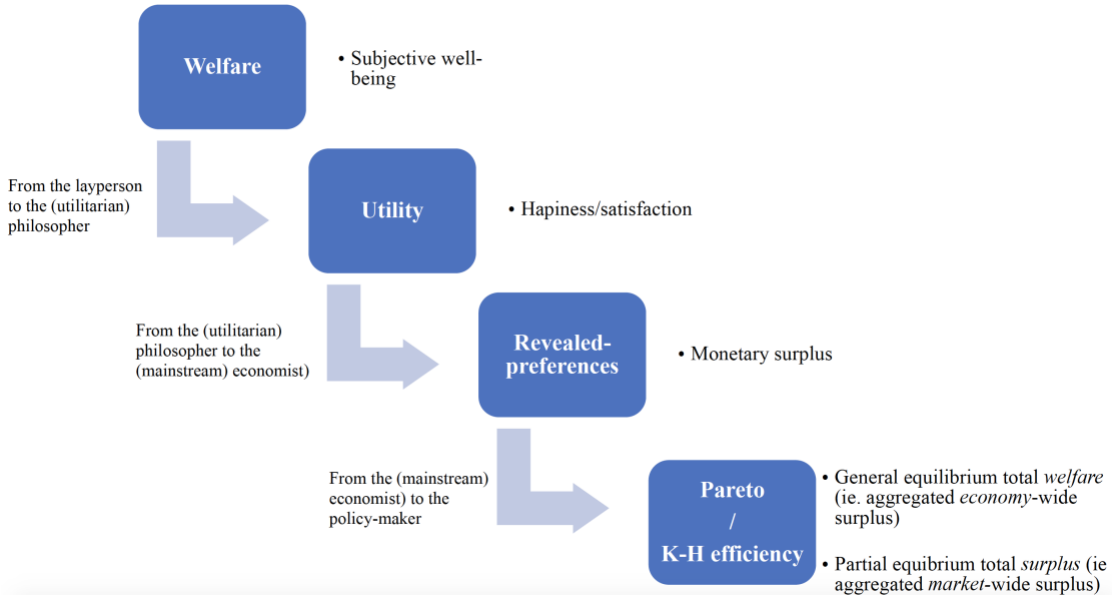

Figure 1.2 *Understanding welfare and welfare-oriented policy-making*

C) (Strong) consumer surplus

Advertising antitrust as a means to serve the consumer's interest in low(er) prices and high(er) output (quality, diversity and/or innovation) is one way of mustering popular support for the policy. Yet, as the discussion so far has hopefully demonstrated, referring to a slogan without giving deeper thought to its significance can distract from foundational issues. The same is true for the consumer surplus goal.[69] Here, two broad sets of potential issues arise. The first relates to normative foundations as such (1); the second pertains to the question of whose surplus "consumer surplus" is really at stake, and the ensuing normative implications (2).

1. Theoretical foundations

As previously noted, several distinct fulcrums seem to be at play here, namely efficiency, justice to consumers, and political economy considerations. Most critical

[69] The following equally applies to "strong" consumer surplus.

appraisals fail to fully appreciate this diversity. What follows offers a succinct corrective.

a) Efficiency

The efficiency rationale is the most prominently advanced justification. It has two potential weaknesses, though. The first is rather paradoxical since consumer surplus is advertised as "purely economic". Economists (we noted earlier) are primarily interested with *social* welfare; redistribution is 'treated as a wash'.[70] Consumer surplus, as a policy goal, therefore has no fulcrum in modern welfare economics precisely because it arbitrarily discriminates against producers.[71] To return to our Uber example: under such a competition policy, drivers could (theoretically) be inefficiently driven into poverty insofar as their squeezed surplus is shared with consumers, say, through low ride prices. For many economists, this lodestar is aberrant.[72]

Why then is it both endorsed and associated with the efficiency rationale? The answer was alluded to earlier: consumer surplus is consistent with neoclassical price theory inasmuch as it provides a useful benchmark for approximately measuring Kaldor-Hicks efficiency. More prosaically, '[t]he consumer is not protected on her or his own behalf but only from a methodological standpoint'.[73] Many of its proponents thus only tolerate this offshoot of the "consumer welfare" paradigm on administrative simplicity grounds and on the assumption that total surplus and consumer surplus

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70 Williamson [1977] 699, 711.

71 *See* Van den Bergh (2017) 97; Cseres (2005) 20-21; Duhamel and Townley [2003] 3, 18-19.

72 Aberrant in the sense that it evokes both Pareto and Kaldor-Hicks efficiency, while simultaneously contradicting them (cf Heyer [2006] 29, 31 (speaking of 'actual Pareto consumer welfare') and Kerber (2009) 103 (noting that 'consumer surplus […] can be seen as an application of the Pareto-criterion'); with Hovenkamp [2013] 2471, 2477 (noting that 'the theory resembles Kaldor-Hicks').

73 Drexl (2011) 317.

usually move in tandem in practice,[74] rather than for its normative superiority.[75]

Does the justification convince? Either it brings us back to the "welfare-as-efficiency" problem discussed earlier; or it reveals the elephant in the room, which is that 'the consumer [surplus] goal is intrinsically intertwined with wealth distribution'[76] and is not as objective as "purists" would have us believe.[77] "Fairness-to-consumers", then, is another foundation in need of examination.

b) Distributive justice

The leading philosophical claim underlying the consumer surplus objective appears to be grounded in the belief that consumers – assumed to form a distinct class of persons – deserve a minimum level of economic welfare. This entitlement would itself follow from a moral commitment binding a society.[78] The concern is thereby one of distributive justice with its purveyors presumably appealing to philosopher John Rawls for a theory.[79]

Rawls will be central to our discussion in Part II; his ideas enable us to rationalize certain upstream platform power plays as competition problems, albeit under the "*competitive process*" paradigm. For the moment, just note that, for Rawls, a society's fairness principles only track fairness when they follow from impartial deliberations.[80] Fortunately, he also explained how decision-makers might achieve this. In a nutshell: resort to a thought experiment and imagine what principles society would

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74 *See* Motta (2004); Blair and Sokol [2013] 2497, 2499. *See* also Akman (2015) 32-34 (discussing five situations in which the application of the two standards would yield different conclusions).

75 Hovenkamp [2018] 71, 124.

76 Drexl (2011) 320.

77 ie economic efficiency proponents. For the analogy to 'purity', *see* Ezrachi [2017] 49, 49-50.

78 *See* eg Pittman [2007] 205, 207-215; Ahdar [2002] 341, 344-351.

79 The assumption is based on the observation that '[w]hile many theories of justice could be employed to defend redistribution as an aim, John Rawls' theory is the most widespread and accepted by the legal academy.' (Rapp [2001] 303, 308)

80 Rawls (1971). *See* further infra ch 4.

select if placed in an "original position" where everyone ignores how contingent inequalities (in things like wealth or abilities) are to be distributed in the real world.[81]

Let us then assume, for argument's sake, that liberal societies behind the hypothetical "veil of ignorance" would have chosen to direct antitrust towards consumer surplus. The policy would hence conceivably be insensitive to the plight of platform-providers so long as consumers benefit.

One response to the claim this would be normatively problematic is the division of labour argument that shifts redistributive responsibilities onto other (non-antitrust) decision-makers.[82] While probing total surplus showed us how the stance might be defeated, a second, more potent, retort was also mentioned. It requires us to draw distinctions between different types of fairness and to separate those which can be said to be relevant for antitrust purposes. This argument is bracketed for the moment, though, as it is essential to our forthcoming discussion on the "competitive process" paradigm.

c) Corrective justice

Remaining within the realm of rights, a third alternative foundation can be couched in terms of *corrective* justice. Some authors have indeed claimed that (US) antitrust is, and should be, about protecting consumers from the unfair "theft" of their surplus.[83] But this would mean consumers enjoy a *right* – not just an interest – to surplus.[84] And at least one thinker has made a compelling case for concluding that the justification for such an entitlement is particularly convoluted and ultimately difficult to sustain.[85] First,

81 Rawls (1971) 12, 136-138.
82 Ayal (2016) 109-111, offers a sophisticated account.
83 *See* supra (n 41).
84 Ayal (2016) 90ff.
85 ibid 90-101. White [2016] 323, makes a similar, but less sophisticated argument. Consumers, he writes, have no right to surplus because, as a matter of positive law, firms are free to set prices.

it assumes that this supposed consumer right to surplus originates from the competitive process itself, mediated by antitrust – that 'antitrust […] involves giving a property right in the competitive outcome'.[86] Second, even if the premise is accepted, one would still need to explain why a "fair" – say, Rawlsian – society would have condoned it to begin with.[87] In other words, would those behind the veil of ignorance have chosen to endow consumers with a right to antitrust protection, come what may? At best, the answer to this question would be controversial.

d) Political economy

A final line of reasoning seeks to justify the consumer surplus goal on political economy considerations. These supporters start from the premise that social welfare is the superior "consumer welfare" avatar. However, they then vouch for an ostensible appeal to consumer surplus because it will, in practice, prove more successful at achieving their preferred end.[88] Deception, therefore, is finessed into this rationale.

What is the reasoning? Well, antitrust decision-makers can be prone to biases due to information asymmetries, whereas firms may self-select their conduct and engage in lobbying tactics. Differently stated, competition agencies are fallible and firms have selfish motivations they can hide when interacting with them. So, if the goal is social welfare, decision-makers would be wise to ostensibly commit to the consumer surplus lodestar instead.

There probably are merits to this logic. Yet, the latter adds nothing to our

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86 Salop [2010] 336, 350. As Ayal (2016) 91-92 explains, the alternative – that producers would have a forced duty to enable consumers to enjoy their surplus – cannot be justified. The only plausible argument is that 'no party has a right to any *specific* price […] [b]ut, the prices offered must [be] the result of an external process limiting the discretion of both seller and buyer', ie competition, protected only insofar as it delivers consumers with their rightful share of the surplus.

87 Ayal (2016) 100.

88 *See* Besanko and Spulber [1993] 1; Lyons (2002); Neven and Röller [2005] 829.

discussion regarding normative desirability.

2. The consumer's many faces

Thus far, whenever the consumer was evoked, reference was being made to the end-(or final-) consumer, unless otherwise stated. Still, what if, as it is regularly suggested (especially in Europe), the addressee of the "consumer surplus" goal was really (also) the immediate buyer – the *customer* – even though the latter will often effectively be a *provider*? One sees here that consumer surplus's foundational issues are further compounded by its beguiling nature.

To be clear, if antitrust must be aimed at this objective, the relevant consumer has to be the final-consumer.[89] Cases involving platforms illustrate why.

Consider two scenarios with Amazon as the main protagonist.[90] In the first, the platform victimizes merchants – say cushion manufacturers – using its *multi-sided* marketplace infrastructure to ultimately reach end-consumers. To keep things simple, let us further suppose that, in so doing, Amazon harms (ie diminishes the surplus of) merchants but unquestionably benefits final-consumers without saddling them with any negative trade-offs whatsoever.[91] Here, merchants are in fact customers of the platform (which takes a commission on every completed merchant-to-consumer transaction) although they are effectively (cushion) *producers* from a functional perspective. Hence, if one argues that antitrust should intervene because Amazon has harmed "consumer welfare" (by decreasing customer surplus) then one is really advocating for *producer* surplus. Were the claim coupled with a convincing justification, this would be fine. To my knowledge, though, it never has been. And the argument does seem difficult to

89 *See* similarly Akman [2019] 589, 590; Rosch (2006) 7.

90 Figure 1.3 summarizes the argument with this example.

91 With this assumption, we obviate the need to make a further value judgement between present-day consumers and those who might be affected in the future.

make. Firstly, there is clearly no (Pareto or Kaldor-Hicks) efficiency basis. Secondly, the corrective justice foundation is already hard enough to build when the final-consumer is taken as the addressee.[92] Finally, if one appeals to Rawlsian distributive justice, then – and recall that we are discussing antitrust's soul here – one would first need to show that merchants (and, for coherence's sake, also any other category of customers/producers) are actually worse off than final-consumers.[93] Not merely because of the impugned behaviour, mind you, but generally. Developing countries aside,[94] this is unlikely.[95]

Now, what if the assumption insuring end-consumers against long-term harm was relaxed? One could then claim that by protecting "customers" – our cushion providers purchasing Amazon's marketplace services – one is really safeguarding the interests of *future* final-consumers. But the argument only works if it is generally true that customer harm usually does somehow trickle down to end-consumers, which is a questionable proposition.[96] Otherwise, advertising antitrust enforcement in such cases as a commitment to "strong consumer surplus" is just to bait-and-switch to producer surplus, a lodestar which, as just explained, sits on even shakier foundations than consumer surplus. Simply put, "customer" surplus seems difficult to sustain from a normative perspective. Moreover, it makes antitrust incoherent. Our second scenario helps us understand why.

Here, Amazon is still victimizing the same cushion manufacturers. However, instead of having them buy the platform's multi-sided marketplace services to reach

92 *See* Ayal (2016) 118 (arguing that a right to profits endowed to producers is hard to justify).

93 One of Rawls's fairness arguments was that behind the veil of ignorance society would choose to favour those who are the least advantaged. He called this the "difference principle". *See* further and for reference infra ch 4 text to n 198. Incidentally, Lianos (2013a) 28, argues that Rawlsian consumer surplus would favour *end-consumer*. Interestingly, the ICN seems to make a similar argument (*see* ICN (2012) para 16).

94 *See* Drexl (2015) 289.

95 *See* eg ICN (2012) para 16 (i).

96 *See* Akman [2010] 315.

end-consumers, the assumption is that they are selling their cushions to Amazon which then *retails* them to final-consumers through its single-sided platform arm. While this situation is more like traditional *buyer* power cases, "customer" surplus can no longer be invoked as an argument. To stay within a "consumer welfare" narrative, one must thereby resort to pleading a producer surplus claim, couched as an *exception* to the consumer surplus rule on the empirically debatable grounds that enforcement will ultimately benefit consumers.[97]

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In sum, the "(strong) consumer surplus" variants of the consumer welfare paradigm have potential normative weaknesses which need to be (re)discussed. Even if one assumes these issues away, the lodestars make antitrust incoherent and force it to make incommensurable trade-offs, especially in platform cases. Our cushion manufacturers might have a leg to stand on when their strategy to reach present-day end-consumers means that Amazon – their tormentor – is also supplying them direct access to these consumers; this makes them protectable "customers" for antitrust decision-makers who place the interests of future final-consumers above those who consume today. Yet, if the same cushion manufacturers chose to deal only with Amazon, their enforcement case against perhaps the same abuses (say, a refusal to deal) must then normatively be framed as an exception to the rule. Why? Because they are not even customers and, ergo, cannot be viewed as "consumers" worthy of protection. Again, some may claim this is all fine. But they should explain why.

[97] This seems to be what Kirkwood [2014] 1, 30ff is effectively arguing.

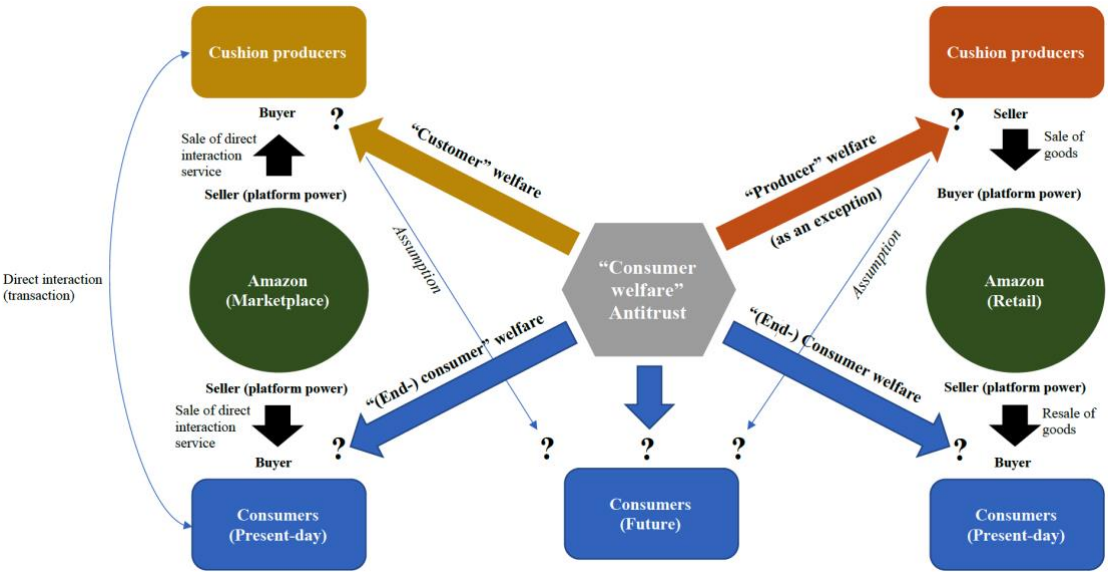

Figure 1.3 *"Consumer welfare"-centric antitrust: which "consumers" and what trade-offs*

D) Consumer choice/sovereignty

Theoretically, "consumer choice" is fundamentally distinct from the other offshoots of "consumer welfare" examined above. As articulated by its proponents, it clearly conjures ideas of corrective justice[98] and has little to do with economic efficiency.[99] The rights discourse is thus summoned anew, this time to lay claim to an optimal degree of choice among products. Like the (*strong*) consumer surplus variants, though, expounding a consumer right to optimal choice potentially involves convoluted and ultimately unsatisfying intellectual gymnastics. It requires explaining how the competitive process itself endows consumers with such a right.[100] Assuming one could

98 ibid 187 (n 35) (positing that the consumer choice approach considers price-fixing cartels as 'undesirable in themselves' because '[p]rices fixed at an artificial level *rob consumers* of the competing price options to which they are *entitled*.)' (emphasis added).

99 Averitt and Lande clearly renege any affiliation with the efficiency-related approaches when they state that consumer choice 'represents nothing less than a new paradigm' (Averitt and Lande [2007] 175, 178).

100 Much like consumer surplus, the consumers' claim to such a right must be grounded in the competitive process itself since the alternative – a forced duty imposed on suppliers to enable such an optimum state of affairs – would not be justifiable. For a more sophisticated argumentation, *see* Ayal (2016) 112-116.

convincingly do so, the entitlement's desirability would also need some justification. For the pursuit of consumer choice per se would often entail sacrificing competition on the altar of increased product variety and/or innovation, deleterious as they may be.[101] Striving for an optimal number of, say, fitness apps, even when this inevitably means more intrusions on, and less control over, our privacy and data, respectively, does not seem particularly enticing.

Bringing behavioural economists into the fold could further debilitate the consumer choice paradigm. Given that consumers are prone to biases, heuristics, and imperfect willpower that often conduce poor decisions,[102] one could ask why consumer choice *per se* should be of such a concern.[103]

Finally, if this lodestar is not (only) about end-consumers,[104] it certainly runs into the same problems exposed earlier in the context of (strong) consumer surplus.

Concluding reflections

"Consumer welfare" is the dominant intellectual paradigm of contemporary competition policy. Its emergence and subsequent crystallization in the legal lexicon mirrored the patterns followed by any scientific paradigm. Like the latter, its dominance does not necessarily reflect its superiority to alternatives – a fact only a 'rational reconstruction of [its] history'[105] uncovers. Doing so unfortunately reveals several potential foundational weaknesses which need to at least be (re)discussed.

Having taken on a life of its own, "consumer welfare" has become a polysemic slogan supported by questionable consequentialist bedrocks. These relate to positive

101 Similarly, *see* Van den Bergh (2017) 99; Lianos (2013a) 23; Nazzini (2011) 31.
102 *See* Stucke [2007] 513, 518-536 (summarizing the contribution of behavioural economics).
103 Petit [2015] 26, 64-65.
104 Averitt and Lande [2007] 175, 183, argue that their consumer choice model 'protects all entities engaged in purchase transactions.'
105 Lakatos (1978) 102.

outcomes competition is mathematically "proven", or morally assumed, to generate, namely some conception of static efficiency or various other consumer interests. But the paradigm has very little to do with the layperson's perception of "welfare", nor is it necessarily concerned with actual "consumers". Of course, the mainstream economist might retort that surplus is the best proxy we have and that a supplier's lost welfare (or surplus) is a form of consumer welfare because everyone is a consumer at some point. Some would therefore argue that by "consumer" welfare one must understand "counterparty" or "trading partner" welfare.[106] If so, though, they should abandon the rhetoric of consumer welfare altogether and offer a convincing normative foundation for this alternative lodestar.

That said, when all these potential issues are ignored, the "consumer welfare" paradigm – properly construed as either total surplus, (strong) end-consumer surplus or final-consumer choice – *can* be sensitive to upstream worries, albeit only *indirectly*. This will become clearer by the end of Part II. Nevertheless, the fact that decision-makers have occasionally shielded providers from the exactions of powerful buyers without thoroughly investigating consumer harm surely means that they were themselves somehow entitled to protection.[107]

Yet, how can our decision-makers "look up" directly – especially in the platform economy – and not be rightly chastised for displaying 'uncritical sentimentality'[108] towards suppliers? Clearly, antitrust cannot be the custodian of concerns alien to *competition*. Calling for provider "fairness" likewise does run the risk of creating a 'vagrant claim applied to any value that one happens to favour'.[109] Can we nonetheless truly affirm that antitrust is normatively devoid of 'any moral

106 *See* eg Baker (2019) 179.
107 Similarly, *see* Zimmer (2012) 491-493.
108 Bork (1978) 54.
109 Areeda and Hovenkamp (1978) para 111d.

content'?[110] These are difficult but essential issues. Luckily, there is an alternative paradigm to "consumer welfare" that wrestles with them. Let us now turn to it.

[110] Hovenkamp (2005) 47.

CHAPTER 2. "COMPETITION, AS SUCH": ANTITRUST'S DEONTOLOGICAL SIDE

Introduction

Throughout the 1990s and early-2000s, everything about digital markets was fast and chaotic. Platform power, let it be recalled, seemed nothing like the market clout which would swiftly prompt our trustbusters into action during the industrial age. "Big platforms" were akin to (pre-covid-19) "Big Pharma" minus the complacency: competition *for* the market was similarly intense but the Schumpeterian gales of creative destruction appeared to be never-ending. So, when Google, Amazon, Facebook, and later, Uber or Airbnb took off, many expected them to rapidly reach orbit before probably just as quickly flaming out into oblivion.

Needless to say, this story has not (yet) unfolded. As noted in the introductory chapter, digital markets today are often not only highly concentrated; they are also marshalled by incumbents that did not collapse after hitting the fateful five-year obsolescence mark. Furthermore, (anecdotal) evidence of their (upstream) mischiefs has been piling up for a decade.

For critics, blameworthy targets are obvious: "consumer welfare"-centric antitrust – especially in the US – alongside symmetrically oriented merger policy.[1] Still, some progressive antitrust scholars argue that the critique is misplaced. "Consumer welfare", they say, merely needs a practical tweak, particularly when the problems are upstream. Instead of focusing on prices (ie consumer surplus), we should put more emphasis on quality and innovation (ie *strong* consumer surplus or consumer

[1] *See* notably Wu (2018) ch 7.

sovereignty), if necessary by substituting consumers with "customers/counterparties" for policy-targeting purposes.[2] This naturally implies either turning antitrust into a potentially groundless producerist policy (as was just explained in Chapter 1) or (as we shall see in Chapter 6) asking decision-makers to achieve what they cannot reasonably do for the moment.

There is, however, another, more radical, approach: shifting paradigms. And if antitrust must pertain to competition and cannot be guided primarily by supplier interests, then the alternative seems pretty clear: the policy should be redirected towards the "protection of competition".

"Neo-Brandeisians" have championed the move in the US. For this lodestar apparently has two advantages.

One: it is 'focused on protection of a *process*, as opposed to the maximization of a *value*'.[3]

Two: it has 'better legal pedigree'.[4]

There is something missing, though. The "competitive process" paradigm may well have the benefit of greater support from legislative intent and early judicial precedent; antitrust would, ergo, be more attuned to the upstream since values like provider freedom and fairness did matter to legislators and courts in the past. But how does this follow from a commitment to "competition"? Advocating for a paradigm shift based on an interpretative theory of legislative intent and/or judicial precedent only works if lawmakers and judges had themselves articulated a normative account. Regrettably, they did not. As legal historians have observed, US antitrust was premised on the axiomatic idea of 'a natural, harmonious, rights-based economic order

2 *See* eg Baker (2019) ch 9.
3 Wu (2018) Concluding ch.
4 Wu (2018) Concluding ch. *See* also Steinbaum and Stucke [2019] 595; Khan [2017] 712, 743ff.

simultaneously tending to maximize opportunity, efficiency, wealth, fairness, and political freedom'.[5] The value of competition, put differently, was taken as self-evident. Sadly, we know today that all things supposedly good about competition are not 'central, largely consistent, and capable of vigorous implementation through "nondiscretionary" […] decisionmaking.'[6]

Admittedly, we could perhaps look to the EU for this lodestar's foundations. There, (a shaky) consensus has it that German Ordoliberal ideas undergird(ed) the judicature's historical endorsement of it.[7] Yet, Ordoliberalism – which is not a monolithic current – has never condoned enforcing antitrust with moral overtones to protect providers.[8]

What the following chapter accordingly sets out to offer is a compelling sketch of a normative account for this alternative paradigm. In so doing, two things will become apparent. Firstly, to protect the "competitive process" does mean safeguarding a *value*: competition, *as such.* Secondly, it is this deontological dimension which enables us to understand why we can appeal to ideals of freedom and fairness to rationalize upstream platform power plays as potential antitrust-relevant problems (Section 2). To see through the argument, ambiguities must once again be dispelled first (Section 1).

Section 1. Clarifying conceptual and normative ambiguity

Suggesting that competition policy's (primary) goal should be to preserve "competition" will probably strike many as truistic and redundant. Politicians, antitrust decision-makers and scholars alike have for decades professed their allegiance to this

5 May [1989] 257, 394.
6 ibid 299.
7 For a good discussion, *see* Behrens (2018).
8 *See* Behrens (2018) 24-25. *See* also Mestmäcker (2011) 32-34 *juncto* 39-41.

ideal. Competition, after all, is what 'makes the world go round.'[9] Numerous advocates of the status quo will, moreover, say the "consumer welfare" paradigm *is* about competition. In fact, one leading antitrust treatise does just that.[10] But at least its authors clarify that their defence of competition only extends to competition 'as the [mainstream] economist understands that term.'[11]

Chapter 1 already explored how mainstream economists only value competition insofar as it can be mathematically demonstrated to generate their peculiar understanding of "welfare". As the reader will come to realize here, such a vision is in no way preordained. Competition arguably does have inherent normative value (B). To grasp this, however, one needs to first be clear on what we are discussing because '[c]ompetition is different things to different men and many things to all men.'[12] The "competitive process" paradigm, we will see, blends together various perspectives on the phenomenon. What then emerges is something lively, unpredictable, multidimensional and normative, which contrasts sharply with the neoclassical economist's depiction of competition.

A) The meaning of "competition"

The "consumer welfare" paradigm (its consumer choice avatar excepted) is an approach to antitrust assisted by mainstream economists whose job is to model a given practice's impact on "consumer welfare". This usually involves sleuthing within a controlled environment where "perfect" competition is either assumed to exist or used to craft a game-theoretic setting of imperfect competition.[13] Doing so ensures analytical rigour

9 Bronson and Merryman (2013) 10.
10 Areeda and Hovenkamp (1978) para 100a.
11 ibid (emphasis added).
12 Bernhard [1967] 1099, 1100.
13 *See* supra ch 1 (n 66).

and mathematical precision. But it is important to realize that "consumer welfare"-centric antitrust also operates with a denatured understanding of competition as a result.

At its most abstract, competition is something complexity theorists would refer to as a *complex system*.[14] The crucial feature of such a system – incompressibility – effectively negates the very possibility of a simple, universal, canvas. To properly depict competition, one must therefore account for multiple perspectives, including, although not exclusively, that of (mainstream) economists.[15] This is what the "competitive process" paradigm recognizes. By adopting a broader, more multidisciplinary lens, it has antitrust protecting an entirely different vision of competition, one which bears the following traits:

- Processual

The neoclassical vision of competition is static. The layman, though, would probably associate competition with a lively process of rivalry between several individuals scrambling over a common purpose. This more dynamic depiction of what is then a processual phenomenon would be shared by most unorthodox economists, be they classical, Ordoliberal, Austrian or evolutionary.[16]

- Uncertain

Some antitrust decision-makers guided by the "competitive process" lodestar have pointed to competition's inherently uncertain nature.[17] This perception finds echo in the

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14 *See* Richardson, Cilliers and Lissack [2001] 6, 7-8 (describing a complex system as a system that (i) has a history; (ii) tends to involve a diversity of behaviours; (iii) displays elements of chaos and self-organization; and (iv) is incompressible in the sense that 'it is impossible to have an account of a complex system that is less complex than the system itself without losing some of its aspects').

15 ibid 13. *See* similarly Andriychuk (2017) chs 2, 4.

16 For a useful mapping of economic theories of competition, *see* Budzinski [2008] 295.

17 Case C-8/08 *T-Mobile* ECLI:EU:C:2009:343 [2009] ECR I-4529, paras 35 (conduct is unlawful 'if it reduces or removes the degree of uncertainty as to the operation of the market in question with the result that competition between undertakings is restricted'); *Great Atlantic & Pacific Tea Co vs FTC* 440 US 69, 80, 83 (1979) ('in a competitive market,

accounts of Austrian and evolutionary economists[18] who draw from the pioneering works of F.A. Hayek and Joseph Schumpeter. Indeed, the former conceived competition as a never-ending and unpredictable discovery process of new knowledge on the needs, options and hopes of all market participants.[19] The latter's depiction similarly involved a dynamic process of rivalry between entrepreneurs perpetually engaged in creative actions and imitative reactions generating perennial gales of "creative destruction".[20]

- Multidimensional

For the mainstream economist, competition is not only a static contest. It is also a game where players are basically indistinguishable, thereby encapsulating the idea of "substitutability" known to every antitrust lawyer. Yet, by relying on such an understanding of competition, antitrust's focus will almost exclusively be on horizontal issues within a precisely defined "relevant market". This is why contemporary practice has marginalized, if not totally ignored, exploitative behaviours (generally) and abuses of superior bargaining power (in particular). As explained in Parts II and III, both are central to our upstream worries.

At this juncture, recall that competition is a complex process. To properly understand it, one must be open to different renditions of it. Openness enables us to realize that "consumer welfare"-centred antitrust overlooks insightful perspectives. Already incipient in J.K. Galbraith's theory of countervailing power,[21] *vertical*

uncertainty among sellers will cause them to compete for business by offering buyers lower prices'; 'the Robinson-Patman Act [must be interpreted in line] with the more general purposes of the antitrust laws of encouraging competition between sellers.')

18 For useful introductions to the main insights of these subdisciplines of economics, *see* Budzinski [2008] 295, 308-313; Kerber and Vezzoso [2005] 507, 513-514.

19 *See* Hayek [1968] 1, translated in [2002] 9.

20 *See* Schumpeter (1934) and (2003).

21 Galbraith (1952).

competition has long since become a mainstay in the channel partnership and business management literature.[22] For years, Michael Porter – perhaps the most influential business scholar – has cautioned that competition for profits goes beyond established industries of substitutes and extends to rivalry with suppliers.[23] So too have unorthodox economists recognized this multidimensionality.[24] The late Robert Steiner's provocative contributions are particularly worthy of mention.[25] Sprawling over three decades, his works provide edifying accounts of how firms operating at different levels of a value chain attempt to 'take market shares, percentage margins and dollar sales or share-of-category dollar sales from each other'.[26] Consequently, the relationship between suppliers and intermediaries is not merely complementary in nature as it is usually assumed. There are also competitive interactions whereby ostensible "partners" are likewise striving towards a common objective: capturing more of the available surplus value.[27]

These insights are particularly important if one is to properly apprehend the incentives of platforms in their dealings with providers. For they are, as the business scholarship is increasingly recognizing, the ultimate frenemies: cooperating to create value; competing ferociously over whatever surplus remains available for appropriation.[28] Take Amazon's marketplace infrastructure, which generates value by reducing friction, enabling consumers to find and sort through the inordinate number of merchant offerings more efficiently than they ever could. To do so, the platform depends on merchants without whom it would have little appeal to consumers. So far,

22 *See* eg the literature review by Weitz and Wang [2004] 859.
23 Porter [2008] 78.
24 These include institutional economics, economic sociology and evolutionary economics.
25 *See* Steiner [1991] 155, [1993] 717, (2002), [2008] 251, and (2011).
26 Steiner [2008] 251, 254. Although based primarily on his experience and observations of consumer goods markets, Steiner's scholarship is no less relevant when one considers the structure of digital value chains.
27 Lianos (2009) 167.
28 *See* eg Lan, Liu and Dong [2019] 943, 946-47.

the dynamic is cooperative. Amazon, though, often markets copycats of its merchants' products. And this decision has been shown to be 'motivated primarily by the desire to capture more value'.[29] In Part II, we shall see how such value capture strategies in vertical competition are diverse and may be rationalized as potential, antitrust-relevant, competition problems. Chapter 6 will draw further implications for enforcement purposes.

- Normative

Competition is a social *phenomenon*. And if one were to query phenomenologists,[30] they would doubtless approve the picture sketched so far.[31] They would, however, flag a major oversight. Competition is also inherently normative for two reasons. One is that it mandates judgement about the relative worth of competitive actions.[32] The other is that competition is necessarily framed by rules.[33] This is what distinguishes it from a simple *contest,* something which is of fundamental importance, as we shall see shortly.

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With the foregoing in mind, one should see that if both antitrust paradigms truly are about "competition", then theirs are two irreconcilable visions of the phenomenon.[34] Under "consumer welfare"-centric antitrust, the starting point is to view competition as a motionless end-state where there is no uncertainty nor innovation. With the "competitive process" lodestar, by contrast, one uses a richer depiction of competition infused by multiple perspectives. The goal, then, is to safeguard a dynamic, multi-dimensional, process of discovery framed by rules of the game. Here, economic agents

29 Zhu and Liu [2018] 2618, 2631.
30 Phenomenology is perceived either as a disciplinary field of philosophy, a movement in the history of philosophy, or both.
31 *See* Kretchmar [2014] 21.
32 ibid 25.
33 Jacobs (2004) 13.
34 *See* Figure 2.1 for a summary.

rival each other to gain new knowledge with the aim of capturing a perceptible share of available surplus value within the chain they operate in.

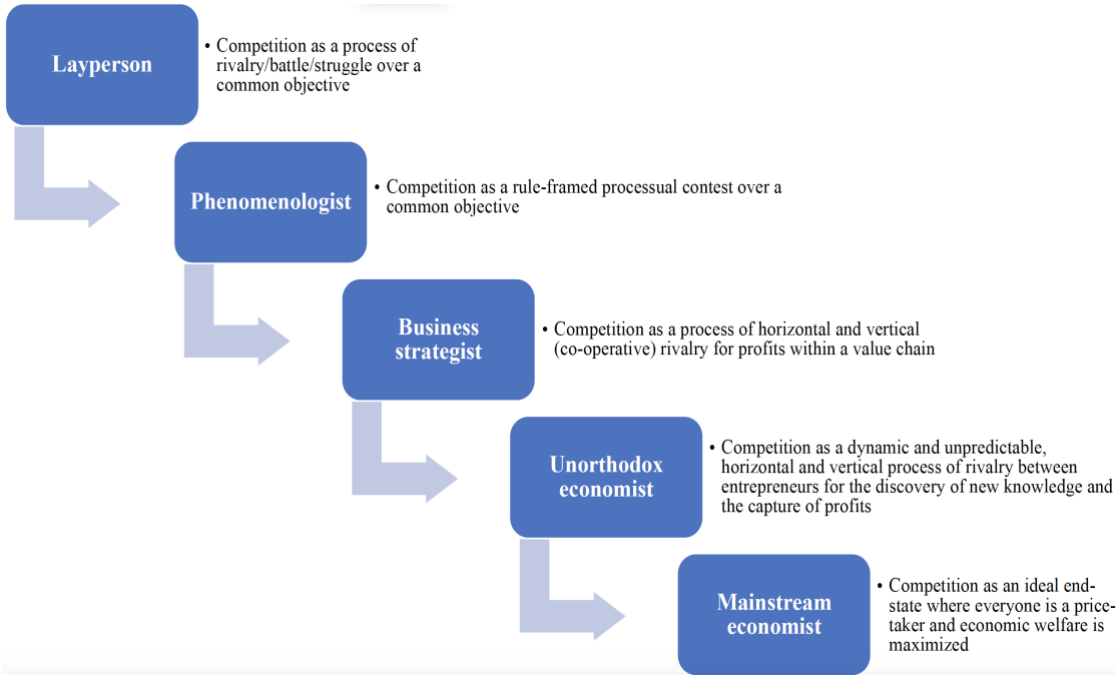

Figure 2.1 *Perspectives on competition*

That said, one aspect of this rendition needs further expounding: competition only exists if there are rules; otherwise it is merely a contest. Here, we must make a crucial distinction – its implications will become apparent shortly and its relevance will carry over to Part III.

On the one hand, economic competition, in a pure sense, can be seen as a "spontaneous" process resulting from human action, but not human design. To borrow from Hayek, the market system is then akin to a "game of catallaxy", unfolding within a basic institutional framework (initially limited to protecting life and property, and to enforcing the laws of contract and tort) which evolves without a specific goal.[35]

On the other hand, competition can also take the form of an "ordered" process,

[35] Hayek (2013) 269.

one whose construction is the by-product of a deliberate and '*eminently political decision*'[36] enshrined in a polity's economic constitution. In such a system, the institutional background is far more comprehensive and the role of the State is not confined to that of the caricatural "night-watchman".[37]

To be clear, ordered competition is not a game where outcomes are planned. It is rather a process framed by actively designed rules which reflect idiosyncratic beliefs a society holds regarding how market interactions should be structured.[38] And to my mind, most societies – at least those that have chosen to endow their respective legal orders with competition laws – are committed to ordered competition.[39] This is why one can justifiably claim 'competition is like a sponge, which absorbs and reflects the moral, ethical, economic, political, and societal values of its time and place.'[40] As explained below, this is also why competition can be defended as a normative beacon for antitrust and why the plight of platform-providers is of *direct* importance under the "competitive process" paradigm.

B) Competition as a value

Contemporary antitrust has been guided by a paradigm which ostensibly glorifies efficiency or furtively supports some idea of fairness to the exclusive benefit of one category of economic agents.[41] Either way, competition is treated as a proxy for a

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36 Böhm [1973] 11, 39, quoted by Bonefeld (2017) 22 (emphasis added).

37 *See* Bönker and Wagener (2001) 185ff; Streit [1992] 675, 678ff.

38 *See* similarly Grossekettler (1989) 63.

39 This is certainly the case in the EU (*see* Art 3(3) TEU *juncto* Arts 101ff, 119 TFEU, Protocol 27 on the Internal Market and Competition (together reflecting the EU's commitment to open market competition); and Case C-294/83 *Les Verts* ECLI:EU:C:1986:166 [1986] ECR 1339, para 23) (expounding the EU treaties as having 'constitutional' value)). Likewise in the US (*see United States v Topco Associates Inc* 405 US 596, 610 (1972) and *Northern Pacific Railway Co v United States* 356 US 1, 4 (1958) (respectively describing the antitrust laws as akin to a 'Magna Carta of free enterprise […] as important […] as the Bill of Rights' 'aimed at preserving free and unfettered competition as the rule of trade'). On the constitutionalization of US antitrust, *see* Brietzke [1988] 275.

40 Stucke and Ezrachi (2020) ch 9.

41 Recall ch 1.

particular outcome. Shifting towards the protection of the "competitive process", in contrast, partly distances the policy from a purely consequentialist outlook by enduing it with a deontological posture. Here, competition is a societal value *in itself* deemed worthy of consideration, regardless of its actual consequences which may sometimes be undesirable. For competition is not always good,[42] nor is it necessarily fair.[43] This complex phenomenon nevertheless remains an 'inescapable fate',[44] one which has come to permeate countless areas of human life, gradually ingraining itself as an 'institutionalized imaginary'.[45] The argument for protecting competition as an independent objective thus lies in two things: its inherent connection with a society's culture[46] and the belief that antitrust cannot be normatively sundered from the latter.

It must not be forgotten that the decision to create a competitive order is a political one, reflecting a collective faith in competition's benefits and a commitment to its virtues. This pledge is anchored by experience and economic knowledge, which both suggest that a well-functioning competitive order can be *expected* to promote a set of instrumentally desirable values.

Economic efficiency is one.[47] As explained in the preceding chapter, it 'has long been a near fetish'[48] for most economists. Paradoxically, contemporary antitrust has confined its quest to allocative efficiency due to its reliance on *static* economic models.

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42 Stucke [2013a] 162 (arguing that competition can breed things like undesirable behavioural exploitation, irrational competitive escalations and inefficient lobbying). *See* also Suzumura (2005) 4-7 (modelling "excessive" competition).

43 *See* infra Section 2.

44 Vanberg (2011) 50. Similarly, *see* Ely [1901] 55, 67.

45 Werron [2015] 186, 197. Similarly, Andriychuk (2012) 104-106 (providing examples of how competition permeates philosophy, physics, religion, psychoanalysis, sports, culture, politics and the legal context).

46 By culture, I mean the 'set of beliefs, values, and preferences, capable of affecting behaviour, that are socially (not genetically) transmitted and that are shared by some subset of society' (Mokyr (2016) 8).

47 Similarly, *see* Andriychuk [2010] 575, 587.

48 Galbraith (1980) 25.

However, we know that more (rather than less) competition probably stimulates innovation and technological progress.[49] Both are widely recognized as the main drivers of economic growth.[50] Directing antitrust towards the protection of the competitive process can thereby be *assumed* to also indirectly foster *dynamic* efficiency.

By the same token, safeguarding competition as such likewise plausibly serves the consumer's other interests. A system of undistorted competition will indeed spur firms to offer them the best possible deals – be it through lower prices, improved quality or increased diversity – to win their favours and to displace rivals.[51]

Evidently, these are all merely *potential* outcomes of a process which – if it is working properly – is by definition *uncertain*. Committing to the "competitive process" paradigm thus means taking a leap of faith. But there is more to it.

Ordered competition is inherently connected to humanistic values and, as such, constitutes a pillar on which liberal democracies rest upon.[52] More specifically, by keeping economic power in check, it enables all market actors to exercise their economic freedoms and participate in the economic game unimpeded by illegitimate restrictions, be they private or public in nature. In so doing, competition stands for *democracy*. Similarly, it also fosters a sense of a priori equality through the *levelling of the playing field*.

By accounting for ideas of "democratic freedom" and "justice",[53] antitrust

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49 Admittedly, the scholarship remains bitterly divided on the nexus between competition and innovation. For a recent, detailed, analysis, *see* Gilbert (2020) chs 3-4, 6 (finding that (i) the theoretical literature is replete with partial theories, which build on the seminal Schumpeterian negative correlation and the Arrowian positive correlation; and (ii) empirical studies show that competition often – not always – promotes competition).

50 eg De Bondt and Vanderkerckhove [2012] 7, 8 and the references mentioned therein.

51 *See* similarly Werden (2011) 36. *See* also Peeperkorn [2015] 43, 48, who, despite rejecting the competitive process approach, recognizes this point.

52 The following points are developed in Section 2.

53 "Justice" and "fairness" will be used synonymously hereinafter on stylistic grounds.

guided by the "competitive process" imperative therefore inevitably recognizes and commits to what is expunged under the "consumer welfare" paradigm, namely the '"liberal spirit" of economic competition'.[54]

What the preceding should make apparent, then, is that competition is a coordinating device which, when ordered and fully functional, can promote outcomes that contribute to societal well-being. Yet, for the latter to ensue, societies must make sure the rules of the game are properly designed and enforced to preserve the process's specific *constitutive* values: democracy and (a certain understanding of) fairness.[55] Advocating for the protection of competition as such accordingly means directing antitrust towards these constitutive values on the historically and economically informed assumption that doing so will ultimately entrain results societies likewise value.[56] So articulated, consequentialist and deontological ethics undergird the "competitive process" paradigm. It is consequentialist since it recognizes that healthy ordered competition (usually) generates socially desirable results. The paradigm is also deontological insofar as it appreciates that making (any of) these outcomes the touchstone of antitrust would normatively impoverish the policy. Competition is a means to achieve appealing ends. But it is 'a political and social *desideratum* no less than an economic one.'[57]

With this in mind, let us now take a closer look at the "competitive process" paradigm's deontological normativity. Before doing so, though, it must be stressed that endorsing the lodestar should not mean foregoing economic analysis, nor ought it imply

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54 Davies (2017) 81.

55 I am inspired by Carter (1999) 54-55 (arguing that "freedom" is neither intrinsically nor instrumentally valuable but has potentially 'specific constitutive value' because it is a 'constitutive part of a certain intrinsically valuable phenomenon').

56 Similarly, *see* Bernhard [1967] 1099, 1159; Zimmer (2011b) 38; Gerber (2008) 42-44.

57 McNulty [1968] 639, 639). Note that certain competition agencies seem to share this view (*see* ICN (2012), para 3).

casting a blind eye to efficiencies. Protecting competition as such simply reflects the need to account for its constitutive liberal values by granting them a regular – not invariably overriding – place, something even the most adamant welfare economist would be sensitive to.[58] This point will be further clarified and illustrated in Chapter 6.

Section 2. Expounding the normativity of "competition, as such"

"Efficiency" and other "consumer interests" may have instrumental value insofar as they arguably do contribute to a society's well-being. As explained in Chapter 1, however, their normative foundations are not without potential flaws. So antitrust could be doing societies a disservice when it uses either of them as a lodestar under the deceptive slogan of "consumer welfare" – all the more so if they are wary about the upstream.

Societal well-being, of course, is the *ultimate* objective of any public policy.[59] Sadly, it cannot itself serve as an *immediate* touchstone.[60] How can we then reconcile all this for antitrust purposes? Well, if focusing on the results of competition is perhaps a bad idea, maybe we should concentrate on the preceding process instead. Two related imperatives, summarized in Figure 2.2, follow from the proposition.

The first is to recognize that effective competition is dynamic and necessarily uncertain. In turn, this means one can never hope to predict its outcomes with Euclidean precision.[61] Economic evaluations of "welfare" effects are therefore only appropriate at a latter level of analysis.

The second is to appreciate how competition is inherently valuable because it

58 *See* Hicks (1981) 137-140.
59 *See* eg Art 3 TEU; US Const, pmbl.
60 *See* Stucke [2013b] 2576, 2596-2602 (raising without defeating 'reasonable objections' to such an enterprise).
61 *See* similarly Mestmäcker (2011) 47-48.

reflects a social commitment to democracy and fairness. Both have constitutive value in the sense that without them ordered competition would not be able to unfold, nor (incidentally) generate the positive results society expects it to.

To direct antitrust towards the protection of the "competitive process" thus means *prioritizing competition's conditions of operation over its potential outcomes*, *while accepting that certain distortions might be justified when the benefits are provably overwhelming*.[62] No doubt, though, we must say more about competition's constitutive values – democracy (A) and fairness (B) – to (i) explain why it is an alternative to "consumer welfare" that is both worthy and more attentive to the upstream, and to (ii) lay the ground for our discussion in Parts II and III.

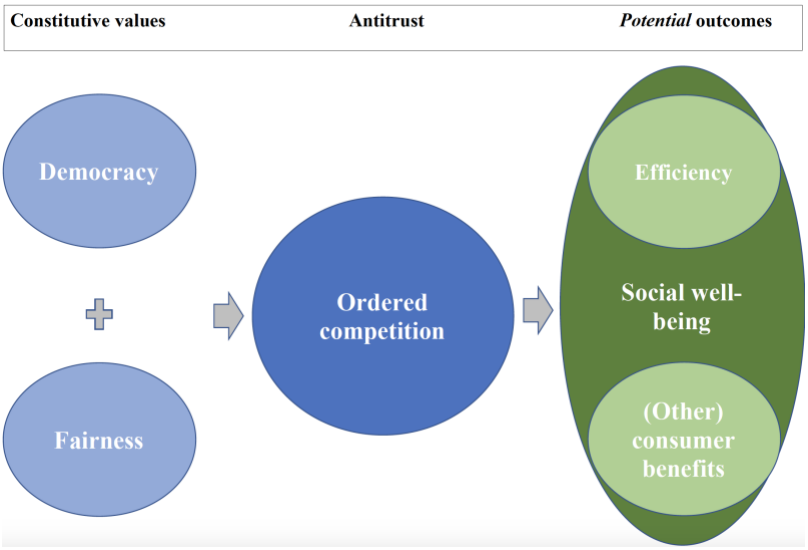

Figure 2.2 *Antitrust's "competitive process" paradigm*

A) Democracy

The idea of a competition-democracy nexus may appear oxymoronic to those who dismiss issues of economic power and believe in the strict separation between the

62 *See* further infra Part III.

political and economic orders.[63] Yet, when both are considered, the democratic character of a fully functioning competitive process becomes apparent beyond the intuitive connection one can make by conceptualizing competitive outcomes as the results of consumer plebiscites.[64] Competition is intrinsically valuable first and foremost because it constitutes a bulwark against the 'phenomenon of private power; a power devoid of legitimation and dangerously capable of infringing not just the *economic freedom* of other *private* individuals, but also the balance of *public* decisions exposed to its domineering strength.'[65]

1. Competition as a bulwark against private planning

Musing on democracy inevitably conjures up questions regarding power, its *locus* and distribution.[66] Following the republican tradition, democracy in the political order is the 'implementation of popular sovereignty'[67] and involves the equality of all citizens in the political decision-making process.[68] Envisioning economic democracy, however, presents a prima facie insoluble conundrum for societies that choose to deal with the problem of allocating scarce resources by establishing a decentralized market economy. Competitive markets, to be sure, are synonymous with freedom; freedom is the keystone of market exchanges[69] and encapsulates in part their ethical value.[70] At the same time, the existence of economic power is an inescapable reality in a market economy.[71] Consequently, freedom inevitably becomes subjected to the relative bargaining positions of trading partners and inevitably falls prone to restrictions. This

63 *See* eg Director [1964] 1, who argued that the benefits of free markets would not be achievable if the 'division of labor between voluntary organization and the coercive state is destroyed'.
64 *See* eg Ayal (2016) 67, making this intuitive connection.
65 Amato (1997) 2 (emphasis added).
66 For a discussion of "platform power", *see* infra ch 7.
67 Barrère (2007) 71, translating Rosanvallon (2000) 11.
68 Christiano (2015).
69 Fikentscher, Hacker and Podszun (2013) 50.
70 Barrère (2007) 86.
71 *See* Vestager (2019a) ('The truth is, power is an unavoidable part of human life.')

is the well-known "freedom paradox"[72] which occurs especially in cases where one party is economically dependent on another. The market system, rife with power inequalities, undeniably does seem fundamentally incompatible with the requirements of democratic equality. How, then, can one think of economic democracy?

The answer, to my mind, is to conceive the ordered market as a "*communitas*", ie a good, collectively owned by all participants who derive their entitlement to participation from their very involvement in the market process.[73] Economic democracy can, ergo, be based on the recognition and protection of *all* actors engaged in production and exchange. Why? Precisely because they all contribute to the collective surplus generated by the market organization, either through the exchange of goods and information or through productive activities.[74] Herein is one reason why the "competitive process" paradigm can justifiably rationalize harm to providers.

Crucially, this does not mean equal power for everyone.[75] Here is where the ordered competitive process comes to the fore. Effectively ordered competition indeed stimulates, directs and coordinates the exercise of individual economic freedoms that are, by definition, not absolute.[76] In so doing, it places *limits* on economic power by preventing its abusive exertions which, if left unchecked, could revive the spectre of economic planning. Not through government, mind you, but by the hand of excessively powerful private actors.[77] As we shall see in Part II, the threat of private planning is

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72 Popper (2013) 117 (attributing its discovery to Plato).

73 Barrère (2007) 92-93. This extends to the economic sphere republican ideas developed by ancient Greek and Roman thinkers, as well as by modern visionaries like Rousseau who all emphasised the importance of thinking society as a whole rather than as a collection of individuals.

74 ibid 94.

75 ibid 95.

76 Drexl (2011) 328.

77 *See* similarly Mestmäcker (2011) 42-44. Most (contemporary) Ordoliberals recognize that ordered competition does not *extinguish* power. For without power there is only "perfect competition" as the neoclassical economist understands it. As explained earlier, this is to say no competition at all.

acute in our platform economy that has a tendency for 'self-created economic law'.[78]

Undistorted (ordered) competition thus reflects economic democracy because it guarantees all market players – including *providers* – the freedom to partake in the race for available surplus value appropriation.[79] Crucially, it does so by ensuring that inevitable inequalities of results do not flow from arbitrary exertions of economic power, but from differences – say, in economic performances – *condoned by societies themselves*, which they will have embedded (perhaps implicitly) within the rules supporting the competitive order.[80]

2. Competition as a rampart to political capture

Understanding the second dimension of the competitive process's democratic essence is only possible if one recognizes the interdependence between the political and economic orders. Here, the issue pertains to the ability some firms possess to leverage the power they hold in the economic sphere to the political arena, thereby threatening the vitality of democratic institutions.

Public choice theorists know all about this "capture" problem.[81] A noteworthy insight from these scholars is that businesses use their economic power to secure favourable political outcomes in subtle ways which are both (often) inexpensive and agnostic to political affiliation.[82] More worrying is the fact that 'influence is subject to economies of scale and scope'.[83] This may set into motion a 'Medici vicious circle'[84] whereby successful exertions of economic power to obtain political power bolsters

78 Großmann-Doerth (2008) 77 (free translation).
79 *See* Drexl (2006) 661-662. *See* also Deutscher and Makris [2016] 181, 191; Fikentscher, Hacker and Podszun (2013) 58.
80 ibid. Ordoliberals – mainly those of the first generation – have long emphasized this point. *See* Eucken (1989) 32-36. *See* also Fèvre [2017] 119; Broyer (2001) 109-110.
81 Public choice is a branch of economics which studies individual decision-making within public bodies to explain why the latter can fall prey to the private interests.
82 Zingales [2017] 113, 122-124.
83 Ayal [2013] 221, 225-227.
84 Zingales [2017] 113, 119-120.

economic clout, which in turn breeds fears of public backlash and political payback that then reinforces the perceived need to exercise political power.

Such a pernicious dynamic may already be at play in our platform economy.[85] An obvious – albeit controversial – example is the suggestion that Alphabet/Google's close ties with the Obama administration are what enabled the platform to weasel its way out of an antitrust indictment in the early-2010s.[86] No doubt, this could be hearsay. Yet, as economist Thomas Philippon details with cold facts, platforms have travelled a lot to Washington in recent years.[87] The reason? '[L]obbying efforts work',[88] especially when the aim is to avoid antitrust scrutiny.[89] Compellingly, it appears that the porosity between political and economic power might also work both ways, as Facebook's partisan tap-dancing since 2016 suggest.[90]

Now, we explained earlier how effective, ordered, competition places restrictions on economic power. It therefore acts as a checks-and-balance mechanism, which not only safeguards the fulcrums of the economic order, but also ensures the integrity and impartiality of the political decision-making process.[91] This is why one can seriously posit that '[o]pen market competition is not only a theoretical underpinning of democracy; it is a barometer of how solid the foundations of

85 *See* Marty (2018) 22-23.
86 Zingales [2017] 113, 123.
87 Philippon (2019) 260ff.
88 ibid 174.
89 ibid 173 ('doubling of lobbying expenditures to the DoJ and FTC reduces the number of cases in a given industry by 9 percent.')
90 *See* Timberg (2020). Prior to the 2016 US presidential election, Facebook was accused of using the "Trending" module of its social media infrastructure to suppress conservative stories. But with the White House under Republican control, the platform pivoted and allegedly implemented a range of infrastructure design changes to quell conservative criticism.
91 Similarly, Deutscher and Makris [2016] 181, 190. Again, this dimension of the competitive process is emphasised by Ordoliberals. *See* Vanberg (2004) 14-18; Fèvre [2017] 119. Interestingly, this understanding of competition as a control mechanism was also shared by the "First" Chicago School of economics associated with the writings of Henry Simons (*see* Köhler and Kolev (2011); Van Horn (2009)).

democracy are'.[92]

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To summarize, the "competitive process" paradigm has the antitrust decision-maker "looking up" because protecting competition as such means safeguarding the *freedom* of all those who partake in the creation of value.[93] It does not, however, imply shielding feeble players for their own sake; nor does (or should) it involve a desire to curtail (concentrations of) economic power at all costs. Large (platform) firms must not be vilified for their size only, which may simply be the natural outcome of the ordered competitive process.[94] Plus, portraying (platform) businesses as 'sinister rent-seeker or compulsive shoppers for political influence'[95] is not necessarily relevant. What the *antitrust* decision-maker guided by the need to protect competition's democratic essence must look out for are practices that prevent victims from making *free* choices, thereby compromising the dynamics of (horizontal and/or vertical) competition.[96]

B) Fairness

1. Competition's moral content

Consensus has it that antitrust is devoid of any moral content and that fairness should be unabashedly purged from the policy's discourse.[97] While harsh, this sounds fair (bad pun intended). The concept certainly does seem indeterminate and impracticable;

92 BIAC (2017) 2. Similarly, *see* Burricher (2008) 24.

93 For an illustration, *see* Case C-453/99 *Courage and Crehan* ECLI:EU:C:2001:465 [2001] ECR I-6297, paras 17-36.

94 *See* similarly *United States v Aluminum Co. of America* 148 F2d 416, 430 (2d Cir 1945) ('The successful competitor, having been urged to compete, must not be turned upon when he wins.') Moreover, recall from the general introduction that platforms tend to operate in winner-takes-all-or-most industries.

95 Ayal [2013] 221, 239.

96 Similarly, *see Associated General Contractors of California Inc v California State Council of Carpenters* 459 US 519, 528 (1983) ('Coercive activity that prevents its victims from making free choices between market alternatives is inherently destructive of competitive conditions').

97 *See* notably Hovenkamp (2005) 47.

relying on it might put antitrust's decisional consistency at risk.[98] More fundamentally still, competition, *by definition*, generates unequal results.[99] So for those who abhor these inequalities on fairness grounds, competition can only be unfair. There will always be winners and losers; losers will get less, if any, of the available surplus value, while winners will sometimes – perhaps often – obtain rewards that are disproportionate to their contributions or with respect to losers. Competition's consequences will hence forever be open to claims of injustice; antitrust can do little about that.

This notwithstanding, the policy's decision-makers should not dismiss outright intuitive suggestions that fairness is an emotion viscerally ingrained within the human psyche.[100] Why not? The answer is simple. Recall that we are discussing *ordered* competition, ie a process moulded by rules which are themselves the fruit of a society's intentional political choices. To my mind, such a society – at least if it is a liberal democracy – will have appreciated and accordingly embedded in (the spirit of) its economic constitution the following idea: for *sustainable competition* to arise and persist, market players must have 'mutual trust and confidence in the behavioural ethics of each other.'[101] There are two reasons for this. The first is that fairness demonstrably matters to people.[102] The second is that competition completely sundered from justice and conducted as if it were '[w]arfare'[103] is not only costly for society.[104] It also no

98 Areeda and Hovenkamp (1978) para 111d; Hovenkamp [2018] 71, 97-98; Carstensen (2017) 26-29; Nazzini (2011) 22-24.

99 *See* Davies (2017) 41 ('to argue in favour of competition […] is necessarily to argue in favour of inequality, given that competitive activity is defined partly by the fact that it pursues an unequal outcome.')

100 Shermer (2008) (claiming that '[t]he moral sense of fairness is hardwired into our brains and is an emotion shared by all people and primates tested for it.')

101 Sen (1995) 26.

102 *See* Wilikens and others (2017); de Barros and others (2009) 46.

103 *Schachar v American Academy of Ophthalmology Inc* 870 F2d 397, 399 (7th Cir 1989).

104 For this argument, *see* Stucke and Ezrachi (2020) ch 9.

longer has anything to do with ordered *competition* because such a process will have degenerated into a self-destructive Hobbesian *contest*.[105]

Ironically, a variation of the above argument explains why fairness would still matter even if we were discussing *spontaneous* competition in the Hayekian sense. Conservative ideology would have us believe in the Physiocratic myth that markets are somehow born perfect and self-sustain themselves free from government.[106] Yet, as noted earlier, even Hayek – the Nobel economist often incorrectly championed by the American libertarian "Right"[107] – believed that the competitive process does not come about on its own. Competition is not parthenogenetic; it needs to be nurtured through rules, many of which will be set and policed by the State.[108] The latter's role in such a system will definitely be a limited one.[109] But because the Hayekian conception of competition draws on classical political economy – Smithean methodology to be more accurate – it can only exist if a certain amount of fairness is present.[110] Adam Smith, was indeed arguably *not* suspicious of public intervention.[111] Actually, he most likely believed that government *is* the political form of the invisible hand, ie the force which enables the system to work its magic by removing impediments to its proper operation.[112] In this vision, the *burgeoning* competitive society evidently is thought to emerge "spontaneously" due to our human propensity to truck and barter. Smith,

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105 First-generation Ordoliberals seemed to be intuitively attuned to this. *See* Böhm, Eucken and Großmann-Doerth (1989) 25.

106 On the "free market" myth, *see* Harcourt (2011).

107 *See* Friedman (2016).

108 *See* Bönker and Wagener (2001) 185; Streit [1992] 675, 680ff.

109 Admittedly, later in his life, Hayek increasingly argued that economic competition was only partly amenable to institutional engineering and that the rules of the game largely evolved through cultural evolution (*see* Bönker and Wagener (2001) 186; Streit [1992] 675, 681).

110 *See* Streit [1992] 675, 682, 697.

111 *See* Bonefeld [2013] 233. As Kennedy (2005) 99 notes, the misrepresentation of Smith as an advocate of *laissez-faire* Physiocratic competition 'is not just a problem of uninformed ignorance. It has become a wholesale, often innocently camouflaged, but nevertheless mistaken distortion of Smith; in some cases a parody.'

112 For Smith, '"State failure" […] was no less serious than "market failure"' (Kennedy (2005) 157).

however, was no Physiocrat. Without government and its rules, he wrote, society would rapidly descend into 'bloodshed and disorder',[113] thereby remaining in a perpetual *contest* against itself.[114] To sustain the transition towards *competition*, the Smithean society would therefore probably also – albeit "spontaneously" (ie without planning for it) – operate under State-policed rules of the game which have a "fairness-bent" to them.[115] For was it not Smith who stated that '[t]he first and chief design of every system of government is to maintain justice'[116] which itself 'is the main pillar that upholds the whole edifice […] of human society'?[117]

In sum, regardless of one's ideology it is difficult to disagree with the idea that competition does in fact have moral substance. The fundamental difference between ordered and spontaneous systems of competition lies in the way they come into existence. The latter is the unplanned outcome of a natural human propensity, whereas the former is the planned creation of a society reflected in a political decision.[118] Hence, unlike the rules framing spontaneous competition, those which organize an ordered competitive process will not only be more comprehensive; they will also purposively mirror a given society's specific ideal(s) of fairness. This, we shall see in Parts II and III, constrains the antitrust decision-maker's discretion and thus impacts the policy's ability to deal swiftly with our upstream platform power plays.

The reader, though, would be right to call me out here. Isn't "fairness", by consensus, both impractical and conceptually indeterminate? The first objection – practicality – relates to *enforcement* and will be examined in Chapter 6. The second goes to antitrust's *soul*, but also to how decision-makers can *rationalize* competition

113 Smith (1976) 340.
114 *See* Bonefeld [2013] 233, 239ff; Kennedy (2005) 234; Evensky (2005) 8-9.
115 *See* Bonefeld [2013] 233, 239ff; Kennedy (2005) 62-65, 75; Evensky (2005) 59ff.
116 Smith (1978) 5.
117 Smith (1976) 86.
118 *See* similarly Bonefeld [2013] 233, 249.

problems. What follows accordingly addresses this second objection only in part. Like our treatment of democracy, the seeds are sown for a more insightful discussion in Part II. We will see there how our upstream worries can be rigorously theorized as potentially harmful under the "competitive process" paradigm.

2. Competition and the two sides of "fairness"

Chapter 1 noted how a concern for fair wealth distribution to consumers/customers/providers – was difficult to justify for antitrust purposes. There, I suggested this is partly because wealth redistribution is a dimension of fairness which is incompatible with the conception of competition antitrust must safeguard under the "competitive process" paradigm. Following the latter, competition's *constitutive* values are the policy's touchstones in recognition of the fact that if the process is working well its outcomes cannot be predicted with absolute precision. In effect, the "competitive process" paradigm entails safeguarding the fundamentals without which ordered competition would probably not be able to generate the benefits societies expect it to. Under this approach, antitrust does not in the first instance fret over market results, wrenchingly unfair as they can be.

That many policy-makers are troubled by powerful platforms capturing too much available surplus value at the expense of providers may, then, be laudable.[119] Yet, for antitrust decision-makers guided by the competitive process, arguably unfair outcomes simply cannot be an immediate worry. The fairness they must be attuned to is different. It is that which *precedes* competition's results: ex-ante fairness (or equality of opportunity (EOp)). This contrasts with substantive (or outcome or ex-post) justice, which relates to things like the "stakes" of the game or the actual identity of its winners. Insofar as substantive fairness is tied to a player's behaviour, it is a matter for unfair

[119] Recall Appendix B.

competition law.[120] And where no clear nexus with a particular practice exists, societies must take their responsibilities. That is, collectively decide whether some players, say, platform-providers, should be protected as a group, or whether certain sources of rents should be excluded from a powerful platform's reward.[121]

The foregoing ideas assuredly do hint at an interfacing issue between different levers of public policy. We shall return to it in Chapter 7. The point, here, is just that antitrust, guided by the "competitive process" lodestar, must sanction unfair conduct. But only insofar as it can be argued to jeopardize the EOp without which sustainable ordered competition would be imperilled.[122] In practice, this means targeted interventions aimed at counteracting the effects of certain (dis)advantages players bring to the economic game. And, as will be further detailed in Chapter 4, there are many reasons we may want our antitrust decision-makers to do so beyond facile appeals to "the people's will" and the plainly vacuous idea of ex-ante fairness on its own. "Impartiality", "respect for persons", "legitimate expectation", "merit", "desert", "efficiency", even "self-realization": all these values lurk behind EOp; each of them, we shall see, can be used to formalize harm to the "competitive process", much like different economic models will say different things on the "consumer welfare" implications of a particular behaviour.

More, though, must first be done here; the critical reader would otherwise rightly berate me for assuming there is anything pellucid in distinguishing ex-ante from ex-post fairness and in linking the former with EOp.

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120 *See* similarly Callmann [1940] 585, 604-607 (arguing that antitrust is about preventing 'a violation of the competitive order as such by contravening or disavowing its *very fundamentals*'; whereas unfair competition law protects 'the interest of the *competitors*' by redressing 'a tort *sui generis*' ultimately grounded in 'the law of *equity*') (emphasis added).

121 *See* Stigler Committee (2019) 36.

122 Of course, some argue that antitrust should also be about "outcome fairness". But their accounts are rather unconvincing since no relation to *competition* is established. *See* eg Horton [2013] 823. *See* also Hughes [2009] 256 (seemingly resorting to fairness as a "catch-all" encompassing both ex-ante and outcome fairness, but also freedom).

The reality is that any theory of EOp inevitably correlates with a specific idea of what outcomes (broadly understood) should look like; of what kinds of inequalities in results should be deemed morally acceptable. In other words, the boundaries between fairness as EOp and justice in consequences are not completely impermeable.[123] However, as will become apparent in Chapter 4, EOp theories of interest to antitrust decision-makers for reasoning and enforcement purposes only encroach upon substantive fairness indirectly (and at varying levels of intensity). For they only affect the *structure* (or *pattern*) – as opposed to the *content* – of outcomes.

More prosaically, recall that economic competition necessarily produces winners and losers. What EOp-minded antitrust decision-makers should be mindful of is not what, or how much, each player receives (ie the stakes), nor who wins and loses per se (ie identity-based outcome fairness). They should rather have an eye to how the ordering – the structure or pattern – comes about (ie the process). Put differently (and, again, this will be further explored in Chapter 4), the question is not whether, for example, Alphabet/Google's behaviour squeezes advertisers dry of their "fair share" of surplus in the (online) (search) advertising value chain. What is decisive here is whether the platform won (or is winning) the vertical competition based on practices that endow it with unfair advantages. This, we shall see, may not be the case if societies value a restricted understanding of EOp, such as one which states that there is no unfairness whenever competition is "open to all".

It would nonetheless be short-sighted to assume that the panoply of theories available to antitrust decision-makers must be limited to those articulating narrow visions of EOp. As suggested above, EOp-attentive antitrust seeks to counteract the

123 Buchanan (1983) 65-66.

effects of certain (dis)advantages which structure market results.[124] Such (dis)advantages can flow from *procedural* defects but also from *background* conditions – ie some competitors are unacceptably better equipped than others.

In sum, "competitive process"-centric antitrust is also mindful of (platform-) suppliers because it must be wary of the EOp without which sustainable ordered competition would ultimately disintegrate. EOp is *ex-ante* justice and comprises "procedural" and "background" dimensions. Here, antitrust does not redress unfair *outcomes* per se, which pertain to any other conceivable element of justice. One is "stakes" fairness – the dimension related to 'regulating what is at stake in the competition, ensuring a broader distribution of the prizes, and limiting how much competitors can gain or lose'.[125] Another is identity-based distributive justice (such as that owed to producers or consumers or any other (sub)groups, say "vulnerable" consumers/producers).[126] And there certainly are more, inchoate, facets. Yet, none of them can be of immediate concern if it is still true that antitrust is and must be about competition.

Concluding reflections

In our increasingly platform-driven age, the argument for placing a premium on efficiency and consumer interests has never been so compelling.[127] But antitrust – a policy that has, for many years now, been anchored by a paradigm which caters to these ideals – is once again in search of a new equilibrium. Back in 1979 when the tide

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124 *See* similarly Gomberg (2007) 1 (stating that EOp, ideally, means 'no one should have unfair advantages in the competition.')

125 Jacobs (2004) 46.

126 For instance, Rawlsian "priority for the worse-off" distributive justice noted in ch 1 (n 93) to which we shall return in ch 4.

127 *See* eg comments made by (then) US and EU antitrust enforcers-in-chief, Makan Delrahim and Magrethe Vestager, regarding the efficiencies of acquisitions made by large technology groups (*see* Shubber (2018) quoting Delrahim), and the importance of protecting consumers in digital markets (*see* Vestager (2018)).

decisively shifted towards the "consumer welfare" lodestar in the US, Robert Pitofsky famously warned that sundering antitrust from the political values inherent to competition was 'bad history, bad policy, and bad law'.[128] Never have his musings seemed more felicitous than today as liberal capitalist societies do appear to be at a crossroad. Many of our digital markets are not only marshalled by a few powerful platforms; they are also often effectively controlled by individuals who believe that 'competition is for losers'.[129] In so doing, the latter are short-sighted in at least one fundamental respect. A monopolist's efficiencies – even dynamic ones – have little value if achieving them means behaving in ways which potentially compromise the sustainability of the entire economic system. As we gaze into antitrust's soul, we need to keep this in mind and 'remember that markets are there to serve people, not the other way round.'[130] And if a large enough fraction of the widespread allegations of upstream platform misconduct are true, then we may have a serious problem on our hands. Indeed, victimized platform-providers cannot reasonably be expected to maintain their faith in what was billed to them as a form of "double thank-you" capitalism.[131] After all, 'our economic system can't work if there is no trust'.[132]

The conundrum is ultimately a political one. Market competition is not spontaneous, at least not in most liberal democracies.[133] The rules of the economic game reflect intentional societal decisions. So when it comes to antitrust – the policy most directly related with the supervision of economic competition – societies need to

128 Pitofsky [1979] 1051.
129 Thiel (2014).
130 Vestager (2019d).
131 *See Google-Snippets* (Case 92 O 5/14 Kart) ECLI:DE:LGBE:2016:0219.92O5.14KART.0A, para 64 (describing the relationship between Alphabet/Google's search platform, publishers, advertisers and consumers as 'win-win').
132 Stiglitz (2019) ch 5.
133 Mid-1980s to late-1990s New Zealand may be one noteworthy exception. During this period, the country embraced widespread *laissez-faire* combined with light touch, efficiency-focused, antitrust (*see* Dunne (2015) 77).

make a choice. Are they better served by a paradigm that glorifies competition's potential outcomes – efficiency or (when properly construed) consumer interests – which can never be really predicted? Or should they instead (re)embrace competition, *as such*, a lodestar that requires protecting the constitutive values without which the process would ultimately degenerate into a Hobbesian contest?

My own view is that persisting with the status quo makes it that much harder to convincingly defend antitrust's relevance in the platform age. For there is a compelling case to be made that the "consumer welfare" paradigm rests on vulnerable normative foundations, even when it is not paraded to mask an unjustified defence of provider welfare. Our focus on platform-suppliers exacerbates what should perhaps have been clear from the outset.

Nevertheless, those resistant to change can rightfully criticize advocates of the only credible alternative antitrust paradigm for not supporting their advocacy with normative legs. This chapter hopefully offers a more convincing account of the "competitive process" and its virtues. It should, at the very least, quell fears that antitrust would become guided by a hodgepodge of socio-political goals betraying a bias against corporate size;[134] or that it would turn the policy into a tool for arbitrary wealth redistribution[135] (which, ironically, is a risk inherent to the "consumer welfare" paradigm). Properly construed, protecting the "competitive process" means preserving what enables ordered competition to sustainably develop, namely economic democracy (or, more specifically, freedom) and EOp. Focusing directly on the upstream is then inevitable.

The canvas is admittedly incomplete. How does the paradigm work when

134 *See* eg Brennan [2018] 49; Dorsey and others (2018).
135 *See* eg Sokol [2020] 1259.

applied to our platform-provider anxieties, and contrast with "consumer welfare"-centric antitrust in practice?[136] This is what will occupy us from here on. From the next three chapters, we will come to appreciate that the paradigm choice is not decisive for the purposes of *rationalizing* upstream platform power plays as potential "antitrust injuries". However, as explained in Part III, it does have an impact on how reasonable decision-makers will *intervene*, ie how competition law will be enforced and interfaced with other available policy levers.

The simple upshot for now, though, is that if one believes the plight of platform-suppliers should at least make our antitrust decision-makers tick, then we need to look deep into the policy's soul as provider interests per se cannot seriously be touted as an appropriate antitrust paradigm. The enterprise has foundational importance and reveals what a society truly expects from antitrust and for what reasons.

At the end of his near-fifteen-year crusade to rewrite the history of US antitrust, Bork marketed the "consumer welfare" lodestar using a powerful message: the policy, he wrote back then, was 'at war with itself'.[137] By most contemporary (bipartisan) accounts, Bork was probably right.[138] But shifting to "consumer welfare" was no panacea; antitrust never did cease self-flagellating. Pivoting towards the "competitive process" touchstone, properly articulated, might finally bring peace to the policy by giving it an arguably sounder, more inclusive, and thus more desirable normative fulcrum. For as Nobel Peace laureate Ernesto Moneta might have described it, this paradigm simply means '*in varietate unitas*'[139] – "unity in diversity".

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136 Neo-Brandeisian accounts are often criticized on both fronts (*see* eg Sokol [2020] 1259, 1262; Melamed and Petit [2019] 741, 764).

137 Bork (1978).

138 *See* eg Sokol (2019) 285 (describing 1950-1960s US antitrust as an 'embarrassment'); Pitofsky (2008) 4 (describing this period as 'almost impossible to defend today').

139 *See* Moneta (1907).

PART II. LOOKING UP

Antitrust decision-makers are increasingly called upon to urgently investigate and adjudicate claims of allegedly abusive upstream platform power plays. Unfortunately, the plight of platform-providers has, to date, garnered insufficient theoretical interest in antitrust cenacles. Practice is currently outpacing theory. This Part, accordingly, attempts to infill the gap. What does it mean to "look up" and what might we see if we did? That is, can we rationalize upstream effects as potential antitrust-relevant "competition problems"? If so, can these concerns be rigorously formalized or must we rely on informal, perhaps even intuitive, theories? Therein lies the crux of our inquiry here.

Now, Part I just laid down building blocks for the upcoming discussion. We explored there the tenets underlying the two normative approaches that may guide antitrust, namely the currently dominant, outcome-based, "consumer welfare" paradigm and the alternative, more deontic, "competitive process" one. From here on, both lodestars are taken as is and put to the test. For the values underpinning them – be they (real) consumers' interest or some measure of economic efficiency, on the one hand, or freedom and ex-ante fairness on the other – can usefully serve our investigation of the ills apparently afflicting the platform economy's upstream environments. Identifying issues that should strike a chord with decision-makers will hereby be achieved by conceptualizing "competition problems" as the symptoms caused by business practices, which may imperil the value(s) antitrust is taken to pursue.

Having said this, recall from the general introduction that the thesis ultimately aims to make a compelling case for the following proposition: upstream platform power

plays create a Procrustean dilemma for antitrust decision-makers. To this end, Chapter 1 revealed how normatively enfeebled antitrust's contemporary paradigm might be, something our upstream worries only further magnify. So why not shift paradigms, especially since an alternative – one which is perhaps sounder and more directly attuned to (platform-) provider anxieties – does exist?

A hypothesis is path dependence.[1] As the next three chapters purport to demonstrate, we can theorize mistreatments of platform-suppliers as potential "competition problems" under either paradigm. However, decision-makers contemplating the move to the "competitive process" lodestar will probably baulk when push comes to shove even though shifting would enable them to rationalize harm in a wider array of cases. The reason is as follows: there is a consensus need for rigour in theory-building.[2] This obviously makes the exercise harder than if one could just rely on informal reasoning. When the goal is to protect "competition as such", though, the challenge is exacerbated by the fact that contemporary antitrust is a field where most would agree (or assume) that, lawyers aside, only the economist's opinion matters. Given that the "competitive process" paradigm is about political values, rigour would have decision-makers appeal to people like political philosophers whose insights have never (or only marginally) made it into antitrust discourse.[3] Hence, even if it is ultimately found to be normatively unsound and/or error-prone, "consumer welfare" enables decision-makers to stay within their uncomfortable comfort zone.

To make this argument, we will explore three categories of practices – practices

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1 Political scientists have long argued that path dependence – ie 'institutional conditions which either block or weaken deliberate attempts to change the status quo' – is relevant in the context of public policy (*see* Torfing [2009] 70).

2 BEUC (2019) 18 ('there is a consensus that agencies should base their actions on […] analytical rigour.')

3 *See* eg then-FTC Commissioner Leary (2000) who assumes that 'it is unlikely that any view of core values can be proven in a rigorous way.'

contemporary antitrust would, by conventional taxonomies, view (primarily) as "exploitative" and thus dismiss almost outright.

Chapter 3 deals with what is denoted as "despotic autocracy". Certain platforms can usefully be analogized to (quasi-) autocratic States whose benevolence we cannot take for granted. For there is a fine line between self-created platform rules that effectively create a positive-sum game and those that are really no different from despotism.

Chapter 4 then looks at abusive "game-mastering". Upstream platform dynamics can often be framed as a game-master/players relationship where providers are players and platforms are game-masters who organize the games and, sometimes, also actively partake in them. As will be explained, the crux here is not the ostensible rules the game-masters may devise to ensure maximum profits or (less cynically) proper game development. It pertains instead to how game-masters may covertly fiddle with them.

Finally, Chapter 5 examines how decision-makers might make sense of allegations that powerful platforms "scrape" the fruits of suppliers' labour or "Sherlock" them out of their valuable ideas. Stripped of their rhetorical enhancers, these claims are about whether the free-riding defence often so successfully invoked to escape antitrust liability should now be turned into a self-standing antitrust offence.

CHAPTER 3. DESPOTIC AUTOCRACY

Introduction

In 1996, digital activist John Perry Barlow published a cringe worthy, but nonetheless influential manifesto entitled *A Declaration of the Independence of Cyberspace*. It reflected the original ethos of the internet as a network organically associated with the idea of decentralized power.[1] For in cyberspace, he prophesized, '[g]overnments of the Industrial World […] [would] have no sovereignty.'[2] A little over a decade later, however, the World Wide Web had become populated by the likes of Facebook, which – by the admission of its CEO, Mark Zuckerberg – is '[i]n a lot of ways […] more like a government than a traditional company.'[3]

Fast forward to today, many platforms do bear eerie resemblances to States within the Westphalian paradigm.[4] Granted, the analogy is flawed – one might rather speak of "quasi-States". Yet, it is striking to observe that the largest platforms have user bases and revenues to match, or even outstrip, that of most States. Their "territories", although not made of discrete land bounded by physical borders, are similarly vast, clearly demarcated, experienced spaces with virtual bournes; these often do foster (much like nations) a sense of shared identity and community.[5] Moreover, some of them actually behave like sovereign actors in the international legal order. Have "super-platforms" not engaged in diplomacy;[6] weighed in on issues of international

1 *See* Benkler [2016] 18, 19-20.
2 Barlow (1996).
3 Kirkpatrick (2010) 254.
4 On the Westphalian paradigm whereby modern State sovereignty is marked by external and internal dimensions, *see* Grimm (2015) 77-98.
5 *See* similarly Cohen [2017] 133, 200; and Cohen [2007] 210 (arguing that cyberspace is most usefully understood as 'connected to and subsumed within an emerging, networked space that is inhabited by real, embodied users and that is apprehended through experience.')
6 Denmark and France have actually sent "digital ambassadors" to Silicon Valley (*see* Maschewski and Nosthoff (2018)).

governance;[7] waded into housing policy;[8] and even ignited wooing games for their headquarters as governments do for pledges of foreign investment?[9]

Crucially, it is not only external sovereignty that is on display. Platforms also regulate their respective domains, wielding a degree of authority to make autocrats green with envy. As explored in this chapter, autocratic governance is a central component of many platforms (Section 1). The ensuing rules and institutions shape our experiences and actions within the infrastructures these firms design and operate. Such a model of private planning is thankfully by and large socially beneficial. But what if the autocratic platforms have taken a despotic turn? Can we rationalize this as a competition problem? The answer is a qualified "yes".

Firstly, although the "consumer welfare" paradigm may be amenable to certain claims of despotic autocracy, its reactivity will likely depend on several factors, including (i) the chosen "consumer welfare" avatar; (ii) the strand of economic reasoning decision-makers rely upon, as well as (iii) the degree of speculation societies will allow them to engage in (Section 2).

Secondly, despite the alternative "competitive process" lodestar's more intuitive fit for capturing these fears, fashioning a sound antitrust algorithm does involve considerable intellectual gymnastics (Section 3).

Section 1. Autocratic platforms

Platforms are a species of online intermediaries whose value proposition often embeds a paradoxical tension between two logics: generative and distributed innovation, on the

7 For instance, Microsoft and Facebook have signed with other high-tech companies a "Digital Geneva Accord" to fight government-sponsored cyberattacks (*see* Sanger (2018)).

8 Hale (2019).

9 *See* eg Bowles (2017) (describing the extreme lengths to which many US cities went to attract Amazon's second headquarters).

one hand, and control of the digital infrastructures they operate, on the other.[10] However, for multi-sided platforms in particular, designing an appealing architecture conducive to sticky (cross-sided) network effects does not, on its own, guarantee sustainability. Similarly to traditional markets, platform infrastructures can "fail", corroded by things like negative externalities and information asymmetries generated by misbehaving users.[11] Hence the need for what business, economics, and information systems scholars denote as platform "governance" (or "regulation"). This moniker encapsulates the various (in)formal norms and institutions implemented by many platforms to drive value creation, which effectively mould competition within the digital environments the latter build and oversee.[12]

The normative significance of these rule-making and policing functions cannot be understated. For while platform governance may be necessary to conduce socially desirable outcomes, it is nonetheless generally the by-product of a 'regime of autocratic control'.[13]

A) Private autocratic governance

Platforms are usually not democratically controlled businesses; they are rather more privately-owned, hierarchically managed, corporations. Plus, while appetite for public oversight is increasing around the world, the governance mechanisms they devise are essentially discretionary and devoid of public accountability. Many platforms are thus akin to private autocrats governing their domains in State-like facture and exercising 'irrevocable and absolute sovereignty'.[14]

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10 *See* Eaton and others [2015] 217.
11 *See* Boudreau and Hagiu (2009) 165; Parker, Van Alstyne and Choudary (2016) 162-163.
12 *See* eg Constantinides, Henfridsson and Parker [2018] 381, 383; Boudreau and Hagiu (2009) 169.
13 Eaton and others [2015] 217, 238.
14 Schwarz [2017] 374, 382. *See* also Cohen [2017] 133, 201-202.

To start with, they prescribe and restrict behaviours, thereby conditioning access to their respective platform infrastructures and shaping how users interact with each other and with the platform itself. Apple requires app developers to adhere to certain format, content, and marketing rules before approving their distribution on its App Store; social media platforms like Facebook moderate the types of authorized speech; and so forth.

Platform governance also includes incentive and nudging mechanisms that influence user behaviour. Default options, filters, and rankings embedded in most platform systems are the most obvious examples.[15] Others can be more discrete, such as Amazon's "one-click buy" button, which prods consumers onto the path of least resistance to completing purchases.[16]

Equally ubiquitous are trust-building institutions. Review, rating, and recommendation devices inevitably come to mind in this regard, but there are many other functionally similar instruments, such as the use of certification and warranties by Uber and Airbnb.[17]

Finally, numerous platforms institutionalize mechanisms to resolve disputes between their users.[18] Consider labour platforms like Upwork that adjudicate claims by freelancers contesting negative reviews; or Facebook's planned "Supreme Court", which will rule on content moderation spats relating to its social media infrastructure.[19]

In sum, platform regulation is altogether variegated, versatile, panoptic, and pervasive. It comprises prescriptive, restrictive, incentivizing, nudging, trust-building, and adjudicative norms and institutional devices that private corporations unilaterally

15 *See* Ecorys (2017) 8-9.
16 Kumar (2018).
17 *See* generally Belleflamme and Peitz (2018b).
18 *See* generally Van Loo [2016] 547 (theorizing the status of the 'corporation as courthouse').
19 *See* Horwitz (2019).

design, amend, implement and enforce through the laws of contract and code.[20]

Non-State governance, to be sure, is neither novel nor specific to platforms; sports associations and leagues, for instance, have always organized sports competition according to self-determined rules, which regulate things like access, conditions of play and revenue-sharing.[21] Nor is platform regulation necessarily harmful as such, for antitrust purposes at least.[22] Self-arrogated rule-setting powers are indeed needed for optimal friction reduction, which is what platforms effectively sell. Given their largely for-profit nature, one might expect them to formulate norms that serve all stakeholders involved.[23] Furthermore, few other options exist since public alternatives – in the form of publicly-owned platforms or government-devised system rules – may be inefficient, unrealistic, and prone to capture.[24]

As hinted in Chapter 2, though, blind faith in the solicitude of autocratic platforms could also be misplaced despite early suggestions that their governance 'is as much about "pleasing all sides" [as] it is about platform profit seeking.'[25]

B) The claims

Rule-setting consumer-facing platforms inevitably come to possess superior bargaining power (SBP) over their providers once they achieve critical mass and are able to sustain positive network effects.[26] This is because the platform-to-supplier relationship departs

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20 For more detailed illustrations, *see* eg Evans and Schmalensee (2016) 135-148; Eaton and others [2015] 217; Boudreau and Hagiu (2009) 171-176. *See* also the insightful theoretical discussion in BRICS Centre (2019) ch 3.

21 *See* Crémer, de Montjoye and Schweitzer (2019) 62-63.

22 Admittedly, some may fret about how large platforms will increasingly displace governmental roles over time, and effectively impose upon us a logic of functional sovereignty bereft of democratic control (*see* eg Pasquale (2017)).

23 *See* Boudreau and Hagiu (2009) 170.

24 *See* Van Loo [2017] 1267, 1296-1310 (arguing that public platforms are likely to be inferior, in need of considerable financial and legislative support, and prone to capture); Boudreau and Hagiu (2009) 169-176 (noting the shortcomings of public governance and arguing that private platform governance is theoretically and empirically more efficient).

25 Boudreau and Hagiu (2009) 186.

26 Boudreau [2017] 227, 235.

significantly from the classical intermediary/upstream set-up where reciprocal relation-specific investments introduce a degree of mutual dependence.[27] When platforms – especially multi-sided ones – are involved, the dynamic changes. Here, it is mainly upstream providers who make relation-specific investments, which means the baseline becomes one where the balance of economic power is tilted towards platforms. What was generally the exception in the analogue era – think of grocery retailing – is hence the default in the platform age.[28]

Platform power, mind you, is something Chapter 6 explores in more detail. Notice already, however, that in a monopoly scenario, the platform can obtain complete control over the market access of providers, effectively becoming a "bottleneck".[29] When the business is multi-sided, this situation can predictably lead it to appropriate roughly 75% of the value created within the network it oversees.[30] Even in less extreme cases, such platforms will often have the ability and incentives to "milk" their dependent suppliers.[31]

Of course, neither skewed value capture by autocratic platforms, nor their SBP are in themselves competition problems. Remember, power imbalances are inevitable and provider-oriented substantive fairness cannot be a guiding lodestar for antitrust purposes. But how should antitrust decision-makers handle claims of what can only be

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27 ibid (n 5).

28 The qualifier "generally" is needed because, as Carstensen (2017) ch 1 explains, power asymmetries favouring intermediaries are perhaps more widespread than is usually acknowledged.

29 Schweitzer and others (2018) 67.

30 *See* Oh, Koh and Raghunathan [2015] 245 (assuming perfectly substitutable apps and a monopolist app store that is the only available distribution channel; and further supporting the prediction with an empirical discussion of the Apple and Google app stores).

31 *See* Schweitzer and others (2018) 67 (noting this is particularly the case where consumers are only interested in a sufficiently large (as opposed to a maximum) number of suppliers and where positive indirect network effects are large). *See* also Belleflamme and Peitz (2018a) 304 (modelling a scenario of competing platforms with multi-homing suppliers and single-homing consumers; and finding this creates a bottleneck effect enabling the platforms to squeeze their providers).

denoted as "despotic" behaviour?

Consider the Australian competition agency's broader inquiry into platforms and its decision to examine complaints levelled by media publishers against Alphabet/Google's former "First-Click-Free" policy. The latter required media businesses, under the threat of reprisals, to provide some of their pay-walled content to consumers *free of charge*.[32] Luckily for us, the authority's final report sheds little light on the practice beyond finding that it dented publisher revenues.[33] This leaves the relevant question unanswered: can we rationalize the platform's take-it-or-leave-it "offers" as potential competition problems?

In a different context, was the US DoJ wrong to dismiss booksellers and authors when they called for an investigation into Amazon's alleged bullying tactics back in late 2014?[34] For in the months prior, the platform had very publicly flaunted its power by exerting unprecedented pressure on Hachette – one of the Big Five publishers – in a dispute over e-book distribution revenues.

And beyond the super-platforms, what is antitrust to make of calls made by a few free-spirited labour and competition lawyers and economists for greater scrutiny of labour platform practices?[35] Sobering evidence of entrenched bargaining power asymmetries leading to below-minimum wages on platforms like Uber or Amazon's Mechanical Turk (AMT) may well strike left-leaning minds as 'the smoking gun of exploitation'.[36] Inequality probably is 'a feature rather than a bug'[37] in the world of platform labour. This reality, however, says nothing about why antitrust decision-

32 ACCC (2019a) 233-235.
33 ibid 235.
34 *See* Trachtenberg (2014).
35 *See* eg Paul [2017] 233; Daskalova [2018] 461; Naidu, Posner and Weyl [2018] 536; Steinbaum [2019] 45.
36 *See* Scholz (2017).
37 Van Doorn [2017] 898, 907.

makers should be unnerved, even if doing so might 'serve the goals of competition and labour policy in a single stroke, and thereby afford added societal value in an era when both policies are badly in need of a boost.'[38]

As the remainder of this chapter explains, theory-building around these types of claims is possible regardless of the endorsed antitrust paradigm. Yet, the enterprise is by no means straightforward if rigour is required. Let us use "consumer welfare" lenses first.

Section 2. Despotic autocracy and "consumer welfare"

"Consumer welfare" is a polymorphic paradigm. This approach to antitrust, we understand from Chapter 1, really reveals a commitment to a specific avatar, namely "total surplus", "(strong) consumer surplus", or "consumer choice".[39] Here, we will see that despotic behaviour by autocratic platforms can potentially be caught depending on the chosen proxy. Rigorous "consumer welfare"-minded decision-makers, though, will also need to pick their models carefully.

A) Marketer platforms

In their relationship with providers, platforms that choose the single life are, essentially, marketers purchasing inputs which are then resold further downstream.[40] As a supermarket would in the analogue world, single-sided platforms like Netflix can thus enjoy buyer power vis-à-vis suppliers. Our earlier-mentioned Amazon claim is a case in point.

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38 Stutz (2018) 20.

39 Remember, total *welfare* is not used in practice, nor does anyone pretend it can actually be implemented.

40 *See* Hagiu and Wright [2015] 184. *See* also Spulber (1999) (distinguishing "marketers" (which include retailers, wholesalers and dealers) from "brokers").

The platform has a documented history of neglecting publisher interests. As industry observers know, terms for the distribution of e-books were up for renegotiation in 2014. And Amazon, they would recall, was ruthless with Hachette – itself a powerful conglomerate – when it came to control rights over retail pricing. Threats of reduced inventory, delayed deliveries, and increased print book prices eventually turned into real reprisals that allegedly injured the publisher, but also its authors.[41] According to some commentators, this was evidence of a *monopsony* power play.[42]

1. The monopsony theory

In economics – contemporary antitrust's privileged source of wisdom – the presence of a monopsonist is just as serious a potential problem as that of a monopolist. According to the standard model, such a firm will squeeze its suppliers by withholding purchases to a point where the latter effectively end up pricing inefficiently (ie below their marginal costs of production). This misallocation of resources always translates into deadweight loss for society.[43] Worse still, higher (or at least, never decreasing) consumer prices will often further compound these total surplus reductions.[44] So too will potentially harmful long-run effects on innovation, quality, and product diversity.[45] "Consumer welfare" – however understood – is thus clearly at stake.[46]

Yet, Amazon (to return to our example) was no textbook monopsonist in the early-2010s, nor is it probably even today for that matter. Why? Because the specifications underlying conventional economic models are so stringent that the phenomenon has been profiled as an anomaly unlikely to betide beyond employment

41 *See* Streitfeld (2014).
42 *See* eg Krugman (2014).
43 *See* Anchustegui (2017) 33-34 and 52-53; Carstensen (2017) 42.
44 For instance, where the monopsonist also has considerable seller market power it will also reduce its sales downstream, pushing consumer prices up (*see* Anchustegui (2017) 52-57).
45 ibid.
46 ibid 52-59.

and agricultural commodities.[47] Economics aside, monopsony is also intuitively improbable. Assuming it is rationally run, a firm like Amazon gains little by squeezing the life out of publishers; this would cripple its ability to serve consumers and make profits.[48]

In brief, marketer platform despotism as a reflection of monopsony is a possible theory of harm to "consumer welfare". But it is a rather implausible one.

2. Bargaining theories

For economists, monopsony abuses are a grave yet highly unlikely scenario. Even so, owing to the development of more sophisticated tools, some game theorists have taken a keen interest to modelling the effects of SBP between vertically-related firms beyond the monopsony context. What do they find?

Generally, their studies tend to have a positive outlook on these situations as the exercise of SBP is usually found to reflect what is known as Galbraithian *countervailing* power. Here, a strong buyer disciplines powerful upstream suppliers into bringing their prices closer to the allocatively efficient level (ie marginal costs).[49] And because the ensuing cost savings will often be passed on downstream, consumer surplus will also predictably trend higher.[50] A far cry from monopsony, SBP is thus typically seen as socially benign, beneficial to consumers, and sometimes even favourable to suppliers.[51] Accordingly, many economists will still feel that 'concerns about buyer power in the

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47 More specifically, monopsony is said to only ever occur where the sole buyer (or a coordinated oligopsony) benefits from: (i) an upward slopping supply curve (which reflects increasing marginal costs of supply); (ii) an inelastic supply curve (implying suppliers have little to no outside options to sell their output); (iii) the existence of economic rents ripe for extraction; and (iv) the existence of high entry barriers on the buyer side (*see* Anchustegui (2017) 37-40; Carstensen (2017) 42). Kirkwood [2014] 1, provides a detailed analysis of Amazon's lack of monopsony power.

48 Anchustegui (2017) 41.

49 Galbraith (1980) 108-134.

50 *See* the literature reviews in Gaudin [2017] 2380, 2383-2384; Anchustegui (2017) 59-60.

51 *See* eg Mérel and Sexton [2017] 259 (whose model suggests that where powerful buyers internalize the fact that exercising their power over suppliers might attenuate upstream innovation and entry, increasing buyer concentration can actually benefit suppliers).

digital world may be […] premature and ill-placed.'[52]

Some, though, would caution the "consumer welfare"-minded antitrust decision-maker against magnanimity. Germain Gaudin, for instance, notes that papers associating SBP with positive effects are often overly case-specific and ultimately unhelpful for antitrust purposes.[53] His theoretical model, by contrast, has broader applicability. And it suggests that the conditions under which rough bargaining by a powerful retailer improves "consumer welfare" (through lower retail prices) are in reality quite restrictive.[54]

That said, bargaining models and their predictions are both complex and very sensitive to departures from the defined parameters.[55] Several models for any given conduct may, moreover, sometimes exist, each differing from the others in terms of finely grained assumptions. So much so, in fact, that decision-makers may understandably become confused.[56] Returning to our Amazon conundrum illustrates this nicely.

As noted earlier, the platform's feud with Hachette (but also with all the other major publishers) was about who should have the right to set retail prices for e-books distributed through Amazon's digital infrastructure. Antitrust lawyers will no doubt be aware that this was something publishers had gone so far as to collude over with Apple in a conspiracy (in)famously outlawed in 2012 for two years.[57] Paradoxically, the

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52 Buttà and Pezzoli [2014] 159, 169. cf Monopolkommission (2015) para 387 (stating that 'it is not obvious that buyer power should be judged in any other way in e-commerce than in classical trade.')

53 *See* Gaudin [2017] 2380, 2381, 2384-2385.

54 ibid 2391ff (in particular, market demand must be very convex).

55 For an overview of the economics of bargaining models, *see* Wright and Yun [2020] 1055, 1057-1064.

56 More generally, Wright and Yun [2020] 1055, find that complexity largely explains the uneven adoption of bargaining models in US antitrust practice. The authors accordingly argue that 'their use should be limited by fact-specific evidence.'

57 *United States v Apple Inc* 791 F3d 290 (2d Cir 2015). Technically, publishers had already agreed to cease (attempts aimed at) setting retail prices of e-books in a settlement with the DoJ.

majors *did* get their way once the ban expired. Amazon eventually caved. E-books would no longer be first sold at a wholesale price to the platform which would then set the retail price (ie wholesale pricing). The large publishers would, instead, now pay the platform sales royalties to distribute their products at a price they themselves would determine (ie agency pricing).

Naturally, this raises the following question: can the DoJ really be faulted for giving the cold shoulder to publishers like Hachette when they appealed for its assistance to deal with Amazon's brutal bargaining tactics? Given the present-day situation, can it not even be argued that Amazon was the real "victim", selflessly fighting the cause of consumers all along? Here, game theorists are as loquacious as they are ambiguous.

For example, one model, which assumes a bilateral duopoly, would absolve Amazon.[58] Why? Because it suggests wholesale pricing is always better for consumers unless horizontal competition between platforms (say, Amazon and Barnes & Nobles) is less intense than that between publishers. Another study, however, contradicts this prediction entirely under slightly different specifications.[59] Yet, in a subsequent analysis, its author finds that when one considers both the platform's incentive to lock in consumers and a longer timeframe, results a more nuanced. The wholesale system, it turns out, is better for consumers at first, but worse long term. Still, the researcher also predicts that agency pricing, while preferable if one values lower retail prices, may inhibit vigorous competition between suppliers on the platform (ie *within*-platform competition) and erode consumer choice.[60]

To complicate things further, another model would always vindicate the cause

58 Foros, Kind and Shaffer [2017] 673.
59 Johnson [2017] 1151. Here, contractual terms are determined endogenously.
60 Johnson [2020] 1.

of publishers… provided a monopoly publisher is assumed and effects on the market for Kindle readers are ignored.[61] Otherwise, the conclusion is that Amazon's behaviour would likely lower e-book prices in order to stimulate sales of its e-reader. The authors, though, themselves overlook a similar, earlier, study whose results are far more ambiguous.[62] And there is still more!

Other economists have faulted all their colleagues for abstracting the bargaining element.[63] This is to say that the latter examine situations like our Amazon/Hachette dispute but wrongly assume contracts are always negotiated under take-it-or-leave-it conditions. By contrast, these economists integrate bargaining. And they find that the consumer's wallet is heavier when control over retail pricing is in the platform's hands – at least, insofar as publishers do not have considerably more bargaining power.

So, was the DoJ overly dismissive? As the foregoing suggests, there is no clear answer. In hindsight, maybe the authority got it right. A recent *empirical* study indeed shows that e-book prices would be *lower* than they are today had Amazon's despotic behaviour succeeded.[64] Its authors further estimate that the fight was actually evenly matched. This gives weight to their theoretical model, which emphasizes the importance of bargaining power distribution for prediction purposes.[65]

Nevertheless, notice that for the "consumer welfare"-minded antitrust decision-maker, all the above is only helpful for capturing price and output effects.

Needless to say, one could speculate about how bully tactics by a powerful platform like Amazon might harm "consumer welfare" in other ways. In our example, had Amazon prevailed in its tussle with book publishers, maybe the latter would have

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61 Abhishek, Jerath and Zhang [2016] 2259.

62 *See* Gaudin and White (2014). *See* also Gaudin and White (2018) for a more general model.

63 De los Santos, O'Brien and Wildenbeest (2020).

64 ibid (finding that retail prices for e-books published by the majors and distributed by Amazon increased by approximately 14% once the transition to agency pricing was completed).

65 ibid.

reduced the quality and/or diversity of their output; perhaps their incentives to innovate in production and design would have diminished; and in the (possibly not-so-distant) future, some may have even failed, which would have entailed a loss of choice.[66]

But – and this will become a recurring theme of my thesis – one can *always* conjecture consumer harm that could be caught under the broader consumer surplus or consumer choice variations of "consumer welfare", be it through lower choice/diversity, quality, and/or innovation. The problem is that these are concerns which will often come from the gut ("educated" as it may be), rather than from a formal model. Besides, even when such theories of harm can be rigorously formalized, they will frequently be based on ambiguous foundations.

The takeaway from the discussion, then, is as follows. Powerful marketer platforms that take a despotic turn certainly should sometimes trigger the interest of "consumer welfare"-minded antitrust decision-makers, even when monopsony is not at play. However, there are two caveats.

Firstly, only those focused on either total or consumer surplus will usually be able to rely on rigorously formalized theories. Authorities that profess a commitment to things like quality and innovation will undeniably bolster their approval ratings with consumers. Yet, regarding the practices we have been discussing here, intuition – informed as it may be – will often be their only guide.

Secondly, even when economists are there to assist, caution is needed. Our digression on Amazon illustrates this. If not, the following subsections should hopefully do a better job.

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66 *See* Sager (2019) 236ff; Kirkwood [2015] 358, 364ff.

B) Broker platforms

"Platforming" is an endogenous business model decision. Some may choose the single life; others will opt to open up their digital infrastructure to enable direct interactions between distinct customer groups. And although economists tend to perceive them as functionally equivalent, such *multi-sided* platforms are more brokers than marketers.[67] This has potentially important ramifications.

1. Prolegomenon

As noted in the general introduction, a relatively young, but now mainstream strand of the IO scholarship deals specifically with these types of platforms. In fact, multi-sided-market economists have been prolific over the past decade. Significantly for present purposes, apex courts on both sides of the Atlantic have added hype to their models in landmark antitrust rulings.[68]

Fortunately (for me), experts have already summarized key insights from this literature better than I ever could here.[69] Still, there is one fundamental lesson we must keep in mind: adopting a single-sided logic – for instance, by relying on models involving retailer platforms – would be a mistake.[70] Policy-makers, it is often suggested, must always remember that multi-sided platforms have to get the right mix of users "on board" to ignite and sustain their businesses. Why? Because these firms cater to distinct customer groups – providers and consumers – whose demand curves and economic welfare are interdependent. This means the effects of their practices ought to be analyzed on all sides mediated through the platform infrastructure and

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67 *See* Duch-Brown (2017) 3; Hagiu and Wright [2015] 184, 185.

68 *See Ohio v American Express Co* 138 SCt 2274, 2280ff (2018) (hereinafter "*AmEx*"); Case C-67/13 P *Cartes Bancaires* ECLI:EU:C:2014:2204 [2014] electronic Reports of Cases, paras 72-87.

69 *See* Jullien and Sand-Zantman [2020] forthcoming; Auer and Petit [2015] 426.

70 According to Ducci [2019] 419, 424, this 'is now conventional wisdom'.

balanced accordingly.[71]

Simply stated, the thrust of multi-sided market economics appears to be that what may seem problematic under a one-sided approach can be misleading. The most oft-cited example is that of price predation: below-cost pricing on the consumer side might not be predatory if it is really a subsidy borne by providers to stimulate adoption of the platform infrastructure.[72]

With this brief excursus in the rear-view mirror, let us return to our allegedly despotic platforms.

2. Application

Formalizing the "consumer welfare" harm potentially flowing from despotic broker platforms is a difficult task since there is a conspicuous gap in the IO literature. To date, researchers have focused on these firms' pricing practices and on conducts that could affect horizontal competition between platforms (such as cartels or foreclosure tactics like tying or exclusive dealings).[73] The study of infrastructure design and governance, by contrast, has been somewhat neglected.[74] Put differently, there is a paucity of useful economic research regarding what has been denoted here as despotic platform autocracy.[75] Until theory catches up, harm will regularly have to be rationalized by relying partly on intuition and partly by extrapolating insights from more general multi-sided platform models whose assumptions may not necessarily fit the situations we are interested in. In so doing, however, competition problems can often become harder to

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71 *See* notably Evans and Schmalensee (2018).

72 *See* in particular Wright [2004] 44, 48.

73 Much of this literature underscores the need to consider platforms' price structure (ie the distribution of prices charged to each side), as opposed to the price level (ie the net price). For references and discussions of seminal works, *see* Jullien and Sand-Zantman [2020] forthcoming. *See* also Verdier [2016] 25.

74 *See* Duch-Brown (2017) 5 (also providing a useful literature review). *See* similarly McIntyre and Srinivasan [2017] 141, 148.

75 *See* also Ecorys (2017) 17 (underscoring this reality); Tirole (2017) 396 (noting that '[t]he economic analysis of these issues […] is in its infancy').

see.

Consider Alphabet/Google – an information broker – and its now-abandoned "First-Click-Free" policy. Media organizations have long argued that the practice crippled their ability to monetize their content through subscription paywalls, while reinforcing the platform's grip on consumers and advertisers.[76] Crucially, publisher dependence on referral traffic, generally, and from Google Search, especially, is well documented.[77] Between a forced giveaway and online suicide, the choice was probably quickly made.[78] This might explain how the platform could enforce a policy which was potentially detrimental to its "partners" for nearly a decade, despite economic theory postulating that multi-sided platforms *must* cater to all their user groups.[79]

Now, the ACCC did find that "First-Click-Free" had negative fallouts on the subscription numbers of publishers that paywall their content.[80] Yet, as the authority pointed out, the practice made perfect economic sense for a broker platform like Alphabet/Google.[81] Free access to otherwise pay-walled content for consumers made Google Search more attractive to them, but also in turn to advertisers who effectively subsidize the operation of the infrastructure. Consequently, the overall wealth pie more likely expanded and consumers certainly did benefit short term. If "consumer welfare" means total surplus or consumer surplus, one can easily sympathize with the antitrust decision-maker who fails to see a competition problem here.

By contrast, when the focus is on *strong* consumer surplus or consumer choice, harm can always be theorized. Lower publisher revenues, some may argue, might result

76 *See* eg European Publishers Council (2018) 6.
77 *See* eg Deloitte (2016). *See* also CMA (2020b) para 5.362-5.368; ACCC (2019a) 218.
78 For instance, when *The Wall Street Journal* chose to opt out from First-Click-Free, its traffic from Google Search plunged by 44% (*see* Sullivan (2017)).
79 Evans and Schmalensee (2018) 48.
80 ACCC (2019a) 235.
81 ibid.

in reduced incentives to invest into producing quality and diverse content, all of which benefit consumers. Again, though, this is the sort of speculation one can rarely back with a formal model or by evidence causally tying the despotic behaviour at hand to the alleged effects.

In sum, when IO theorists who counsel against using more traditional models enter the equation, formalizing a theory of "consumer welfare" harm will often be more challenging, regardless of how the paradigm is construed. The potentially perverse consequences of such "multi-sided" logic are perhaps better appreciated in the context of labour platforms.

C) Labour platforms

The compensation labour platform-providers obtain for their services is notoriously low. And some scholars say this reflects the monopsony power wielded by platforms and/or their consumers.[82] Implicitly, theirs is a call to shift analytical lenses. The labour platform-to-provider relationship, they would argue, really unfolds within a labour – as opposed to a product – market where platforms are employers (or monopsony facilitators).

While these allegations occasionally betray somewhat loose handling of the concept, there are reasons to believe that platform-providers do face monopsony-like conditions in certain industries.

Consider ride-hailing and food delivery. At first glance, the latter seem quite dynamic and competitive, despite their increasingly high levels of concentration; Uber, Deliveroo and the likes have long dangled bonus payments to entice drivers to sign up,

[82] *See* eg Naidu, Posner and Weyl [2018] 536.

while maintaining attractive prices for consumers.[83] Yet, if perfect and complete data were publicly available, one might find proof of an upward-slopping labour supply curve – the bellwether test for monopsony in labour markets.[84]

One reason may be conjectural as platforms like Uber owe much of their success to broader macroeconomic shifts. Fissured labour markets, marked by a growing reliance on contingent, flexible, and (bogus) self-employed work, have become pervasive over the past two decades.[85] This – combined with a deep pool of economically vulnerable and "commodifiable" un-, under-, and mis-employed workers – might partly explain how these platforms have managed to thrive, despite experiencing considerable levels of provider churn.[86] For if these markets were truly competitive, rational platforms would not be able to sustain their businesses, as per both standard and multi-sided market theory. At least, not while simultaneously depressing wages (or "fees") to the point where many suppliers just exit the market. Uber and AMT, for instance, reportedly face respective turnarounds among drivers and "Turkers" of roughly 150% and 140% each year.[87] Besides, some economists have empirically examined and confirmed the existence of monopsony power on the consumer side of the AMT platform.[88] And if early covid-19-era data are anything to go by, these broader

83 Bond (2019). Interestingly, Anchustegui and Nowag (2017) have explored the potential exclusionary effects of Uber's bonus-related practices.

84 An accurate measurement would require access to information relating to standard metrics like the marginal product of labour, total revenue, marginal revenue product, and marginal labour costs.

85 *See* Weil (2014). *See* also Katz and Kruger [2019] 382 (finding that contingent labour arrangements rose from 10.7% in 2005 to 15.8% in 2015).

86 *See* Newlands, Lutze and Fieseler (2017) 6.

87 *See* Cusumano, Gawer and Yoffie (2019) ch 3, section 3 (for Uber); Scholz (2017) 29 (for AMT).

88 *See* Dube and others [2020] 33 (attributing the existence of an upward-sloping curve to (i) idiosyncratic tastes of providers for particular tasks; and (ii) the cost of processing information, which makes it difficult for providers to determine which task is best for them).

macroeconomic trends are here to stay.[89]

A second reason for the potential presence of monopsony conditions may be that the latter are, to some extent, artificially manufactured by the platforms themselves through various governance mechanisms. Ethnographic studies of Uber and Lyft drivers are insightful in this regard. They point to the intensive use of data-driven, algorithmically implemented, behavioural nudges and scheduling prompts. What for? To prod drivers into working longer hours, thereby ensuring a constant (over-) supply on the provider side of the platform.[90] The "surge pricing" algorithm is a well-known example.[91] Other mechanisms blend technology with gamification and involve sending predictive messages to drivers about future occurrences of high demand, or prompts to exploit their tendency to set earning goals.[92] Plus, a cross-national survey of labour platform users in the EU further suggests that artificially "driving up" supply of providers is the basic purpose of these discrete governance mechanisms.[93] These features are, notably, not confined to ride-hailing platforms.[94]

Mind you, the ostensible organizational efficiencies these platforms do entrain

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89 *See* Stephany and others [2020] 561 (focusing on the US, find that workers are increasingly resorting to labour platforms and that demand quickly recovered, even surpassing pre-pandemic levels in some occupational areas).

90 *See* Rosenblat and Stark [2016] 3759.

91 *See* Chen and Sheldon (2015) (using proprietary Uber data and finding that '[o]verall, it appears that the dynamic pricing mechanism is very effective in encouraging short-term supply growth on the Uber platform by encouraging partners already on the system to contribute more time than they otherwise would have.') *See* also Rosenblat and Stark [2016] 3759, 3765-3771 (finding that many drivers continue to absorb the costs of being available, accessible and responsive to the platform, despite the absence of any guarantee they will effectively be compensated for their time).

92 *See* Rosenblat and Stark [2016] 3759, 3765-3771. *See* also Scheiber (2017); Woodcock and Jonson [2018] 542 (explaining that this form of gamification is associated with management practices, which seek to extract maximum effort or output from workers through the introduction of gamic elements to make an activity more pleasant, enjoyable or bearable).

93 *See* Newlands, Lutz and Fieseler (2018) 47-48. Admittedly, one should interpret survey results cautiously. Beyond the method's intrinsic limitations, only 9.1% of the 6,000 respondents were platform-providers. Moreover, the proportion of ride-hailing platform-providers was not disclosed. Nevertheless, the study usefully corroborates more discrete ethnographic research.

94 *See* eg Field and Forsey (2018) 9 (finding that Deliveroo also artificially manufactures an oversupply of couriers by, for instance, not limiting the number of couriers that can access the order zones it creates).

are important.[95] But the fact remains that, in theory, monopsony is not conducive to "consumer welfare" (however understood). At least, not until the empirical literature integrating labour platforms' multi-sided nature is factored into the analysis. To see this, let us focus on Uber, which has been the preferred test subject of economists.

One study finds that, during the first 24 weeks of 2015, Uber generated roughly $1.60 of consumer surplus for every dollar spent by consumers in the platform's four largest US markets.[96] On a yearly basis, this translates into an estimated $2.88 billion in consumer surplus, or $6.76 billion when extrapolated to the entire nation.

Another, more recent, study reinforces the narrative.[97] It finds that from March to April 2017, Uber's algorithmic management increased total and consumer surpluses in the city of Houston by respectively 3.53% and 6.98% of gross revenue. It did so, though, while decreasing the surplus of drivers by 1.97% of gross revenue. Uber, hence, shifts wealth from drivers – especially those driving during off-peak hours – to consumers and to itself in a way which probably enhances both consumer and total surplus.[98]

And the effects are not only monetary. Some researchers find that quality and choice have improved: consumers gain significantly through shorter wait time and more comfortable travelling when compared to taxis and subways.[99] Moreover, they also benefit because tech-aided matching nudges drivers to provide their services in areas under-served by other transportation modes.[100]

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95 *See* World Bank (2019) 40 (stating that the rise of these platforms 'marks a shift in the potential nature of firms more generally.')

96 *See* Cohen and others (2016) (using proprietary Uber data).

97 Castillo (2019).

98 ibid 3, 69.

99 Lam and Liu (2017) (using publicly available New York City (NYC) transportation data and granular data on surge pricing and wait time on Uber and Lyft in 2016).

100 Lam and Liu (2020) (using NYC taxi, Uber, and Lyft records with data on Uber and Lyft dynamic pricing and wait time). Kim, Baek and Lee [2018] 118, reach a similar conclusion taking a different perspective.

In short, monopsony-inducing algorithmic control of drivers is a winning proposition for consumers and the economic welfare of society as a whole. A potential competition problem we can formally rationalize under a one-sided approach accordingly becomes nearly impossible to visualize under a multi-sided lens.

Soberingly, the dilemma probably extends beyond Uber to labour platforms more generally. As some scholars have theorized, if these firms value efficiency, they *must* govern the infrastructure in a way that 'negatively affects (ie reduces) the cost of labour and the time it takes for [platform-] workers to complete a work task.'[101] This means negative upstream effects are in fact necessary to conduce efficient outcomes in the short-run, even if it 'can also lead to unfair treatment of workers and threaten the long-term sustainability of platform work.'[102]

D) Summation

Despotic practices of autocratic platforms can be rationalized as potential competition problems under the "consumer welfare" paradigm. However, theory-building around these matters is not straightforward.

For one, formalizing the potential harm will often only be possible if "consumer welfare" means consumer or total surplus. The reason is that, beyond static surplus effects, there will rarely be (at least for now) models providing a rigorously constructed narrative explaining why and when these types of practices might degrade innovation, quality or diversity. To wit, the additional harms decision-makers committed to *strong* consumer surplus or consumer choice would be attuned to will usually have to be rationalized through (informed) speculation.

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101 Shafiei Gol, Stein and Avital [2019] 175, 185.

102 ibid.

For another, even when economists can usefully lend a helping hand, the complexity of their work may confuse antitrust authorities and courts. The latter may, at the very least, have to expend considerable resources into parsing out what is relevant from what is not. The point should not be understated, especially when broker platforms are concerned and the issue of multi-sidedness becomes salient. Remember, economists themselves will often disagree on when multi-sidedness needs to be accounted for.[103] They may sometimes even butt heads over whether a multi-sided platform is at stake,[104] and, if so, on what ground(s).[105]

With this in mind, let us now examine how the "competitive process" paradigm would fare by comparison.

Section 3. Despotic autocracy and "freedom"

A) Prolegomenon

For many of us, the intuitive reaction to charges of despotic autocracy would probably be that such behaviours offend our sense of what "free" competition is about. This, though, has nothing to do with "consumer welfare". Freedom, as explained in Chapter 2, is in an integral component of the economic democracy antitrust must safeguard under the "competitive process" paradigm.[106]

That said, recall the overall claim the thesis is attempting to make a compelling case for: our upstream worries are problems that place antitrust in bed with Procrustes. And one aspect to the argument (foreshadowed in the introduction to this Part) goes as follows: while shifting paradigms might leave the policy standing on sounder normative

103 *See* eg Boik (2018).
104 *See* Auer and Petit [2015] 426, 432-436.
105 cf Auer and Petit [2015] 426, 455, with Gilbert [2015] 165, 170-171, regarding e-books.
106 Recall ch 2 text to n 66.

foundations when it tries to "look up", a lack of incentives might inhibit change. "Consumer welfare", we just saw, clearly can do the job – albeit, perhaps, a laboured one – when autocratic platforms take a despotic turn. Furthermore, if the consensus need for analytical rigour still holds, "competitive process"-minded decision-makers would have to roam beyond the chartered territory of (neoclassical) economics to theorize their fears.[107] This is something many will likely be loath to do. Why? Because formalizing a freedom-based theory of harm means appealing to political philosophers who, unlike modern economists, are not 'trained to take an interesting question and squeeze it as quickly as possible into a formal model.'[108] If decision-makers in jurisdictions like the US and the EU were not inclined to do so during times when such claims were routinely made but rejected for their lack of rigour,[109] they will probably remain reluctant today.

The foregoing notwithstanding, one should have no illusions that the harm to competition flowing from despotic platforms can actually be formalized under a *self-standing* concept of freedom. Reviewing the political philosophy scholarship reveals that attempting to do so would plunge antitrust into a discursive sinkhole. Let me briefly explain.

- "Negative" freedom

Freedom is often defined as the absence of interference (a view espoused by the classical liberal and libertarian political traditions).[110] Yet, endorsing this conception only leads to the freedom paradox mentioned in Chapter 2. Decision-makers have long

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107 *See* similarly Sullivan [1977] 1214.

108 Roemer (1996) 2.

109 *See* eg *Continental Television Inc v GTE Sylvania Inc* 433 US 36, 54 (1977) (agreeing with critics describing older jurisprudence (that relied on freedom to rationalize the harm flowing from vertical restraints) as 'a perversion of antitrust analysis').

110 *See* Carter (2018); Prendergast [2005] 1145, 1146.

recognized the insoluble dilemma it creates since any exertion of power would then be problematic from an antitrust perspective.[111]

- "Positive" freedom

Liberty is also taken to have a positive dimension: self-mastery or autonomy enabled by one's ability to achieve valued ends, which in turn requires the widest range of choices and capacities.[112] This understanding, though, seems inapposite for antitrust purposes. Indeed, it does not involve *constraints*, but rather the presence of something indeterminate, identifiable in the works of visionaries like Jean-Jacques Rousseau and Immanuel Kant.[113] Even if it were relevant, how would decision-makers determine when it has been impinged? For example, do Uber and AMT deprive their providers of their independence and autonomy by algorithmically manipulating them; or do they instead empower them by enabling individuals who would otherwise be marginalized from traditional labour markets to generate an income?

- Freedom as "non-domination"

Finally, one may ask why "competitive process"-centred antitrust would at all countenance platform *autocracy*. Were the first antitrust laws not grounded in the belief that '[i]f we would not submit to an emperor, we should not submit to an autocrat of trade'?[114] Even if the platforms under discussion here were benevolent, this would be 'an absolutism all the same'.[115]

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111 *See* eg Case T-168/01 *GlaxoSmithKline Services* ECLI:EU:T:2006:265 [2006] ECR II-2969, para 171 ('any contract concluded between economic agents operating at different stages of the […] chain has the consequence of […] restricting them […] in their freedom of action.'); *GTE Sylvania* (n 109) 54 ('As Mr. Justice Brandeis reminded us: "Every agreement concerning trade, every regulation of trade, restrains. To bind, to restrain, is of their very essence.')

112 *See* Prendergast [2005] 1145, 1147-1148.

113 ibid.

114 21 Cong Rec 2461 (statement of Sen. Sherman).

115 Brandeis (1934) 73.

These concerns do have merit. There is an early-20th-century vibe to them, reminiscent of the legal realist and (old) institutional economics traditions in America, and of the first-generation German Ordoliberal school.[116] More significantly still, their critique can be formalized by relying on a normative conception of freedom which has been key to the renaissance of republican political theory, namely that of "non-domination".[117]

However, several strands of "neo-republicanism" exist and, even under its most antitrust-compatible, "neo-Roman", version, liberty remains conceptually unhelpful.[118] For freedom, according to its leading theorist, means complete emancipation from subordination and dependency;[119] it requires 'the absence of *capacities* for arbitrary interference.'[120] By this measure (among other objections), competition just cannot arise. Economic power asymmetries and dependence are inevitable unless the ambition is to instil "perfect competition" (in the neoclassical economic sense), which itself 'has little claim to be called "competition" at all'.[121] Hence, to have antitrust directed towards the protection of "freedom as non-domination" is really to covertly cover a sensitivity for a particular vision of *outcome* fairness,[122] a value the policy cannot justifiably further directly.[123]

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116 For insightful pieces on how the legal realist/institutional economics traditions influenced US antitrust, *see* Hovenkamp [1990] 993; Page [1995] 1. On the Ordoliberal influence in EU antitrust, recall Behrens (2018).

117 Though most fail to make a connection, Rahman's scholarship explicitly recognizes this kinship and explores it in great detail (*see* notably Rahman [2017] 41; [2016] 1329; (2015)).

118 For a short account of the various strands, *see* Larmore [2003] 96.

119 Pettit (1997) 5.

120 Pettit (1997) 276 (emphasis added).

121 Hayek (1980) 92. Remember, under the model of "perfect competition", everyone is a price taker. Oddly enough, for some neo-republicans, this shows that their attitude towards markets is celebratory (*see* eg Taylor [2013] 593).

122 *See* Shapiro [2012] 293, 332 (arguing that, although connected to egalitarianism and freedom, non-domination is a different form of social justice). *See* also Lovett (2010) (widely cited as the premiere theorist of non-domination as social justice). Interestingly, Progressive era thinkers like Robert Hale also seemed to use "freedom" 'as a rhetorical stand-in for material wealth' to ultimately argue for a more equal distribution of it (*see* Fried (2001) 70 (expounding Hale's work)).

123 Recall ch 2 text to n 119.

Liberty, in sum, is probably an inherently pluralistic ideal. Notionally, it cannot be usefully untangled for antitrust purposes. Our drive when we "look up", then, ought not be to settle which dimension of it truly captures its essence. Rather, we must find more heuristically helpful concepts that enable us to say antitrust is protecting the freedom of providers all the same. This is the endeavour the remainder of this chapter devotes itself to.

B) Coercion

1. Prolegomenon

Famed economist/political scientist Charles Lindblom once wrote that 'liberty in market systems exists only if everyone is able to escape coercion at the hands of any one buyer or seller by turning to another.'[124] And rightly so: there can be no competition without choice.[125] *At the very least*, therefore, one can likewise agree with Hayek in saying that '[t]he task of a policy of freedom [such as "competitive process"-minded antitrust] must […] be to minimize coercion or its harmful effects, even if it cannot eliminate it completely.'[126]

Beyond its obvious causal correlation with unfreedom,[127] "coercion" does seem *intuitively* felicitous as a label for (some of) the fears discussed in this chapter. What's more, it is not conceptually obscure to antitrust. For one, coercion was probably the fulcrum of vertical restraints jurisprudence in the US before the paradigm shift towards "consumer welfare" reasoning.[128] For another, it remains central in certain jurisdictions, especially those whose competition laws corset firms enjoying SBP below levels of

124 Lindblom (1977).
125 Behrens (2006) 228.
126 Hayek (2011) 59.
127 *See* similarly Samuels (1997) 134.
128 *See* Burns [1991] 379; Page [1995] 1.

market dominance.[129]

Many, though, dismiss coercion as one of those 'metaphysical entities'[130] with 'no operative economic meaning'.[131] Not without reason, one should add. As Hayek himself wrote, 'coercion is nearly as troublesome a concept as liberty itself, and for much the same reason':[132] it is prone to manipulation. But the ambition here is not to settle the meaning of this recondite concept. It is merely to ascertain whether coercion can provide a more heuristically useful device for formalizing a freedom-based theory of harm to competition that might capture despotic practices of autocratic platforms. Moving forward, we must nevertheless be wary of semantic constructions in which deception is finessed.

2. Theorizing coercion

Coercion has riveted thinkers across the social sciences and within different areas of the law alike.[133] By parsing out this rich literature, one thing becomes apparent: ways to formalize the coerciveness of cases similar to those examined in this chapter – instances of highly '*constrained volition*'[134] in private settings[135] – do exist. Theorists agree that coercion involves a threat (as opposed to an offer) to bring the coercee below a certain baseline.[136] However, consensus splinters over what kind of baseline should be used – an empirical/statistical/descriptive one or a normative/moral one? – and under

129 *See* eg the guidelines on SBP rules enshrined in Japanese and South Korean antitrust laws (referenced and discussed by Cheng and Gal (2018)).

130 Posner (1990) 185.

131 Liebeler [1993] 909 (n 93).

132 Hayek (2011) 199.

133 For a useful review of its historical development in a variety of settings, *see* Hafiz [2016] 1071.

134 Wertheimer (1987) 9 (arguing that cases of "constrained volition" – a situation where an agent is confronted with unwanted alternatives but is capable of making rational decisions – are the '*standard* cases of coercion').

135 There is an abundant scholarship on coercion by the State, which does not appear relevant here (*see* Hafiz [2016] 1071 for a review). Indeed, despite the analogy of platforms with States, platforms are (for the most part) still private law entities.

136 This consensus follows from Nozick (1969)'s seminal exposition.

what specifications.[137]

a) Empirical

Taking the empirical route is appealing because the analysis supposedly becomes purely factual. The problem, though, is that neutrality often eludes those who profess it.

Consider libertarian paragon Robert Nozick's seminal discussion.[138] A proposal, he argued, is a coercive threat if, among other things, 'it makes the consequences of [the coercee]'s action worse than they would have been in the normal and expected course of events.'[139] Yet, anyone can sense the difficulties inherent to Nozick's descriptive framework for antitrust purposes. What is the "normal or natural expected course of events"? Who should determine it? And against what benchmark? These issues are likely to prove intractable for decision-makers and pave the way for arbitrary rulings riddled by value judgements.

For instance, when Amazon threatened to artificially increase delivery times on Hachette books to bully the publisher into submission, what was the objectively "normal" alternative situation? On the one hand, although the platform already had a reputation for being an aggressive negotiator, maybe this was taking things an unexpected step further.[140] On the other hand, unless Amazon was clearly dominant at the time, it would have undoubtedly been entitled to go so far as to delist Hachette's books.[141] And even if the platform was dominant in 2014, the argument would then be that Amazon abused its power by successfully threatening to commit a potential

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137 *See* Wertheimer (1987) 7 and 204-207. *See* also Hafiz [2016] 1071, 1086; Lamond (2013) 5; Stewart [1997] 175, 214.

138 *See* Nozick (1969).

139 Nozick (1969) 447.

140 Bond and Mance (2014) describe Amazon as having employed 'some of the most aggressive tactics in industry history during negotiations under way with Hachette'.

141 *See* similarly Budzinski and Köhler [2015] 265, 279.

antitrust offence. Note that to me, this might be coercion.[142] But the example shows how the empirical baseline is not purely factual.[143]

Covert reliance on normative baselines appears to be a common issue with many empirical theories of coercion. There would be no qualms if it were "freedom" being funnelled through the backdoor. Disappointingly, it rarely (if ever) is.

Reflect on David Zimmerman's account, which could be relevant for our labour platform worries.[144] He argues that wage proposals are coercive where the worker 'would prefer to move from the normally expected pre-proposal situation to the proposal situation, but *he would strongly prefer even more to move from the actual pre-proposal situation to some alternative pre-proposal situation*.'[145] The alternative "pre-proposal situation", he adds, must be 'historically, economically and technologically feasible.'[146] Even so caveated, this theory is nonetheless 'vulnerable to a *reduction ad absurdum*'.[147] Or else it is moralized, with coercion pegged to some potentially limitless ideal of substantive fairness.[148] To make it more empirical, one would have to substitute the subjective preferences of the putative coercee – say, an Uber driver – with assessments made by some fictional "reasonable" arbiter. Doing so, however, would be benignly paternalistic, at best, or completely arbitrary, at worst.[149]

Of course, we could avoid some of these pitfalls by endorsing the old institutional economics algorithm for thinking about coercion; in other words, assume

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142 *See* infra subsection b).

143 In fact, Nozick (1969) 447, seemed to recognize this: '[t]he term "expected"', he wrote, 'is meant to shift between or straddle *predicted* and *morally required*.'

144 Zimmerman [1981] 121. Another is that of Trebilcock (1993) 93-96 and 101. The welfarist (as opposed to freedom-based) nature of his theory is eloquently explained by Stewart [1997] 175, 229-230.

145 ibid 132.

146 ibid.

147 Alexander [1983] 160, 161. Indeed, taken at face value, every proposal would be coercive because there will always be a preferred pre-proposal situation that the offeror prevents the offeree from obtaining.

148 ibid.

149 Hafiz [2016] 1071, 1091.

it inheres in the scarcity assumption itself.[150] The concept would become redundant, though. Worse, it might bridge to excesses of past antitrust jurisprudence where coercion was believed to inhere SBP and did not even require evidence of pressure.[151]

b) Normative

Considering the foregoing, it may be true that 'any useful conception of coercion is irreducibly normative',[152] for present purposes at least.[153] And, despite the bevy of baselines one could conjure,[154] this approach seems rather straightforward given our aspirations. Liberty, it bears repeating, 'is liberty not equality or fairness or justice or culture, or happiness or a quiet conscience.'[155] Even so, the better view is probably to be prudent and to start from a point of consensus before expanding the theory's reach.

At a minimum, can we not then say a freedom-based coercion claim might succeed where the contentious proposal involves an irresistable threat to commit what is unlawful?[156] That is, threatening to breach (any) legal rights, such as those flowing from contracts or even antitrust itself.[157]

Had it been invoked, this primitive theory might have convinced one US antitrust judge in a 2009 case which was factually similar to our Amazon story.[158] There, a small Print-On-Demand (POD) book publisher called BookLocker had sued after the platform threatened to remove BookLocker's "Add-to-Shopping-Cart" button unless the publisher agreed to print them using Amazon's printing service. The

150 *See* Samuels (1997) 143-144).
151 *See* Page [1995] 1, 24-27.
152 Sullivan [1989] 1413, 1428.
153 Wertheimer (1987) 212 (arguing that 'coercion claims are contextual'; there need not be '*a* best answer to the choice *between* the various tests.')
154 *See* eg Frankfurt (2015) 71-72 (using substantive unfairness as a baseline); or Basu [2007] 559 (relying on Pareto efficiency).
155 Berlin (2014) 186.
156 *See* notably Stewart [1997] 175 (whose theory is mainly centred on this principle). *See* also Nozick (2013) 194; Wertheimer (1987) 39, 215ff, 308.
157 *See* Akman [2014] 99, 109. *See* also Trebilcock (1993) 92.
158 *BookLocker.com Inc v Amazon.com Inc* 650 FSupp 2d 89 (DMe 2009).

allegation was admittedly framed as an unlawful tie – an offence usually reasoned by the conduct's exclusionary (as opposed to its exploitative) effects. Furthermore, the dispute was settled soon after the platform's motion to dismiss was rejected. But there is something noteworthy for present purposes. The judge, while recognizing the unusual nature of the tying claim, nevertheless opined that evidence of such threats was enough to 'permit the plausible inference that Amazon [was] unlawfully forcing purchase of its POD printing.'[159]

Importantly, to my mind, coercion as the threat of unlawful behaviour extends to take-it-or-leave-it "offers" which enable the firms making them to circumvent the legal rights of their "beneficiaries". This is how one can properly rationalize some of the most controversial antitrust rulings against platforms.

Take the ADLC's eye-popping interim decision against Alphabet/Google in April 2020.[160] The agency argued there that the platform had prima facie sinned because it bullied press publishers into licensing their content for free. How? By threatening the removal from its online search infrastructure of "press snippets" – these are the short extracts, photographs, infographics and videos of press publications the search engine displays alongside the links that refer to the source website. Notably, the ruling explicitly states that one of the grounds for qualified illegality was the apparent circumvention of a purportedly redistributive French copyright legislation.[161]

Chapters 5 and 7 will return to what lurks beneath the behaviour. As will be explained, when Alphabet/Google displays press snippets that are *not* legally protected, the issue is not coercion. It rather pertains to whether the platform is "scraping" – or, more forthrightly, *free-riding* on – their efforts. In the ADLC's case, however, the

159 ibid 102.

160 *Syndicat des éditeurs de la presse magazine* (Case 19/0075M) ADLC Decision 20-MC-01 19 April 2020.

161 ibid paras 242-254.

practice could be deemed coercive *insofar as* the contentious content was at least plausibly entitled to legal protection. For in such a situation, "victims" are bullied into foregoing the legitimate exercise of their rights, which is the basic ethical commitment of any freedom-based theory.[162]

Coercion, so understood, thus hopefully formalizes what the authority only intuitively got right. After all, relying on a CJEU precedent, which itself does not explain why circumventing non-antitrust laws might be a competition problem, leaves it open to criticism.[163] Even more so since the cited ruling could be construed as refuting what the ADLC alleges.[164]

Having said this, how much further can we stretch the concept of coercion if the "competitive process" paradigm precludes us from pandering to weak providers for their own sake?

Perhaps one could include situations where the proposal fundamentally impairs victims' "autonomy".[165] This is what the BKA (in)famously did in its controversial, downstream-looking, *Facebook* decision, which condemned the platform's take-it-or-leave-it, privacy law-impinging, terms of service.[166] Fortunately, the ruling can also be read as an implementation of the narrower theory just outlined above.[167] Why

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162 *See* references supra (n 156). Wertheimer (1987) 217-218, suggests something similar. But he is more ambitious because his theory extends beyond legal rights to cover *moral* rights. The problem, though, is that he minimizes the difference between moral and legal rights (*see* ibid 308). Epistemologically, he could be correct. But insofar as we are concerned with "freedom", Wertheimer's account is problematic since moral rights may derive from fairness concerns. Returning to our Google case: absent legal protection over their content, press publishers' claim can only seriously be defended on outcome fairness grounds. This will become clearer by the end of Chapter 5.

163 *Syndicat des éditeurs de la presse magazine* (n 160) para 242.

164 *See* Case C-457/10 *AstraZeneca* ECLI:EU:C:2012:770 [2012] electronic Report of Cases, para 132 ('the illegality of abusive conduct under Article [102 TFEU] is unrelated to its compliance or non-compliance with other legal rules').

165 *See* Stewart [1997] 175, 189-197 (discussing – again, in the context of contract law – "improper proposals").

166 *Facebook* (Case B6-22/16) BKA Decision 6 February 2019, para 527.

167 ibid paras 525ff, especially 541 *juncto* 899 ('[t]he substantive application of data protection law through competition law stipulations does not in any way threaten the consistent interpretation of data protection law, but rather promotes consistency'. […] 'For the freedom of competition

"fortunately"? Well, if autonomy means the ability to make rational choices then coercion loses its notional potency – nearly all trading relations are voluntary by this measure. The theory would, moreover, become potentially boundless. As philosopher Gerald Dworkin writes, '[a]utonomy is a term of art introduced by a theorist in an attempt to make sense of a tangled net of intuitions, conceptual and empirical issues, and normative claims.'[168]

Do other options exist? Possibly. Nevertheless, objections can already be levelled at what is our purely legal theory of coercion. The most crippling one, to me, exposes its circularity. The critique has an implacable logic to it; hiding behind consensus approval or directing such critics[169] to the defects of their own alternatives would merely skirt the matter. Yet, how could any antitrust system that values freedom not be troubled by the behaviour of those whose economic power effectively acts as a moat against the legal order itself? While antitrust is not a nostrum for all the ills of the world,[170] it surely cannot remain impervious when economic power is the source of those scourges.

Those magnanimous enough to indulge the riposte may naturally further question the theory's practicability. This point, though, does not relate to theory-building; it pertains to *enforcement,* an issue explored in Chapter 6.

Paradoxically, even by the standards of my modest ambitions, others may rather chastise me for conceptually impoverishing coercion. Not all claims of despotic autocracy will find echo in the theory laid down here. Labour platform practices, for instance, often seem to be implemented 'without giving off a whiff of coercion'.[171] Yet,

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is aimed specifically at giving the opposite market side the opportunity to decide freely on the agreement of contractual terms.')

168 Dworkin (1988) 7.

169 *See* notably Hale [1923] 470, 476; Kronman [1980] 472, 482.

170 *See* the discussion in ch 7 below.

171 Scheiber (2017)). Alphabet/Google's First-Click-Free is potentially another.

"thinness" is not a potent argument on its own, although it does raise the following question: can these concerns at all be formally rationalized as competition problems under a freedom-based theory? Let us examine it.

C) Oppression

While he 'did not present a "theory" of liberty […] for our times',[172] Isaiah Berlin – one of the most renowned thinkers of freedom – did suggest unfreedom could result from 'oppression'.[173] Incidentally, oppression has also sometimes been limned as an evil antitrust must root out.[174] Might it then serve as an additional fulcrum to coercion for uncovering other acts of despotism, especially those of labour platforms? What follows shows that an affirmative answer is possible. But there is a price: ad-hocism.

1. Theorizing oppression

Oppression is one of those timeless concepts which will forever inspire thinkers. Modern liberals like Thomas Hobbes and John Locke (to name a couple) seemingly deployed it to frame the tyrannous rule of an unconstrained autocrat resulting in the negation of liberal political rights, economic deprivations, and physical brutality.[175] Even more so than coercion, however, oppression is (almost) always taken as something unmistakable, be it in the few antitrust renditions of it, or in the philosophical literature. To my knowledge, Ann Cudd's account is actually alone in offering more in terms of careful conceptual analysis. Hers is one erudite philosophers have praised for its scope and precision;[176] borrowing from it for our inquiry here therefore seems like a rather safe bet.

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172 Lukes [1994] 687, 693.
173 Berlin (2014) 183.
174 *See* eg Grimes [1997] 113.
175 *See* Cudd (2006) 6.
176 *See* Benson [2009] 178.

According to Cudd, 'oppression is an institutionally structured harm inflicted on groups by other groups using direct and indirect material and psychological forces that violate justice.'[177] More specifically, she argues, it obtains when there is (i) harm borne from an institutional practice; which is (ii) perpetrated through a social institution[178] or practice on a social group whose identity exists apart from the oppressive harm; by (iii) direct or indirect material and psychological forces; which ultimately (iv) unfairly benefits another social group.

Returning to platforms-providers, Cudd's framework cannot be neatly applied if only because substantive unfairness is one of her central requirements. And to suggest that labour platform-providers can be analogized to "social groups" (as defined by Cudd)[179] might similarly offend some – at least as it regards cloud-work platforms like AMT[180] – although the soundness of this requirement has been questioned.[181] Nevertheless, these objections do not seem entirely crippling given our modest aspirations; why would we need to funnel in outcome fairness if the antitrust worry pertains to "freedom"?

Consider labour platforms: as noted in Section 1, most (non-labour-law-oriented) accounts tend to emphasize the arguably blatant unfairness of the compensation-level providers secure for their services. Be that as it may, they miss what is relevant; what 'one cannot *and often does not want to see*',[182] namely the hardwiring

177 Cudd (2006) 26.

178 Such as rules or other institutions that 'specify behaviours in specific situations for persons who fit particular roles regardless of their individual characteristics, and the specified behaviours are in some sense required under threat of some penalty for noncompliance.' (ibid 50)

179 ie '*a collection of persons who share (or would share under similar circumstances) a set of social constraints on action*.' (ibid 44)

180 *See* Graham, Hjorth and Lehdonvirta [2017] 135, 155 (suggesting that given the cloud-based nature of these types of platforms, the development of 'class-consciousness' among providers is inhibited). However, this may not be the case for gig labour platforms like Uber, as suggested by Newlands, Lutz and Fieseler (2018) 52 (finding a 'far greater perception of Uber drivers, among themselves, as a collective group.')

181 *See* Benson [2009] 178, 180.

182 Van Doorn [2017] 898, 899.

of institutional constraints on suppliers within the platform infrastructure's design that systematically place the interests of consumers/employers as sovereign. Empirical studies by digital ethnographers, digital media researchers and some labour lawyers have evidenced this, although all underscore the complexity which makes it hard to uncover and explains why it is 'scarcely reflected in the legal academic literature.'[183]

The most obvious restrictions are embedded in these platforms' terms of service. Those of AMT are especially enlightening since they exacerbate bargaining power asymmetries in favour of consumers (called "Requesters"). How? Most notably, by endowing Requesters with two things. One: absolute discretion on the conditions of the bargain to be struck with suppliers.[184] And two: the ability to engage in compensation-theft.[185] In the same vein, gig labour platforms like Uber enforce tightly drafted and unilaterally amendable take-it-or-leave-it terms that, in particular, deprive providers of any control over fares.[186]

Other constraints, which conduce economic oppression when combined, are far subtler; they are buried in code, often generating 'few discrete unavoidable demands and involv[ing] little direction by *any* human being.'[187]

Ride-hailing and food-delivery platforms, for example, algorithmically impede effective choice-making of their drivers and couriers in a myriad of ways. Manufacturing information asymmetries (which magnifies bargaining power imbalances) is one.[188] Gamifying the platform infrastructure (which, as previously

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183 Calo and Rosenblat [2017] 1623, 1649.

184 This includes matters such as compensation (for which Amazon still does not set, nor recommends a minimum), providers' approval ratings and self-reported country. *See* eg Irani [2015] 225, 227; Aloisi [2016] 653, 667.

185 ibid. AMT's rules enable Requesters to keep work product *they* deem unsatisfactory without, however, having to compensate providers.

186 *See* generally Newlands, Lutz and Fieseler (2017) 8-9; Rosenblat and Stark [2016] 3759, 3763; Aloisi [2016] 653, 673 (regarding Uber); Field and Forsey (2018) 13 (concerning Deliveroo).

187 Das Acevedo [2018] 793, 814.

188 *See* Calo and Rosenblat [2017] 1623, 1661 (finding that Uber implements, inter alia, a policy of blind ride acceptance, whereby the driver is unaware of the consumer's destination (and thus

noted, maintains a constant flow of supply on the provider side) is another.[189]

Rating mechanisms, while usually portrayed as efficient means to reduce information asymmetries and search costs,[190] are also restrictive institutional devices, which, cumulatively, oppress providers. Again, the dynamic is insidious. Ratings affect suppliers' eligibility and ranking within the infrastructure. In so doing, these systems effectively put consumers "in the driving seat" (bad pun intended) and conduce what sociologists denote as "emotional labour". This means service providers (like Uber drivers) 'suppress or contain their emergent emotions to present a placating or welcoming demeanour to customers, regardless of that customer's reciprocal emotional state.'[191] Why? Because by contrast to online marketplaces for goods (like Amazon), reputation mechanisms on labour platforms do not operate as signals of supplier quality;[192] they instead serve as a means for consumers to punish providers.[193]

Likewise, platform-adjudicated consumer/provider dispute resolution institutions are instruments of platform-induced oppression as well if allegations of systematic bias in favour of consumers are true.[194]

What's more, the fact that these harms are to some degree self-inflicted does not invalidate a finding of oppression. As Cudd explains, oppression can arise and endure indirectly.[195] This is the particularly invidious case where the oppressed "choose" the conditions under which they suffer. For structural constraints (such as

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the remunerative value of the trip). Similarly, Veen, Barratt and Goods [2019] 388, 397-398, find that Deliveroo and UberEats withhold critical information from couriers, such as the complete details of deliveries and how the different factors (like proximity to restaurants) affect their ability to receive orders.

189 Recall (n 92).

190 *See* Belleflamme and Peitz (2018b).

191 Rosenblat and Stark [2016] 3759, 3775. *See* also Newlands, Lutz and Fieseler (2017) 21-22.

192 *See* Filippas, Horton and Golden (2020) (finding that with labour platforms, consumers/employers tend to inflate their ratings because they are aware of the costs negative public feedback may impose on providers).

193 *See* Wood (2018).

194 *See* eg Rosenblat and Stark [2016] 3759, 3765.

195 Cudd (2006) 146, 152-153.

poverty or unemployment) may cause them to organize their preferences and make decisions which come to perpetuate their oppression.

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What the foregoing hopefully illustrates is that labour platforms (such as Uber, Deliveroo, AMT and the likes) arguably do engage in what has been termed as provider "oppression" under a fairness-agnostic account of the notion. Oppression follows from the combination of subtle, multifaceted and often invisible institutional devices infused with a logic of consumer supremacy and cloaked in the language of technological solutionism to mask cumulatively significant restraints on providers. Ironically, a study by Uber-affiliated economists seems to unwittingly confirm the idea. It suggests that the platform's entire business model depends on pleasing consumers by exerting panoptic control over suppliers.[196]

Hence, assuming labour platform-"partners" are independent contractors in the legal sense – they often aren't, but this is what the platforms argue – can we not now say these non-coercive incursions on their freedom are potential competition problems? A well-known general principle of antitrust indeed has it that competition requires every independent economic operator to 'determine independently the policy he intends to adopt on the […] market'.[197] This principle, one should remember, precludes the embedding within vertical dealings of subordination which should only exist in employment relations.[198]

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196 *See* Liu, Brynjolfsson and Dowlatabadi (2020) (finding that devices such as monitoring, rating, and conflict resolution probably explain why (in their empirical setting) Uber drivers took fewer detours than taxi drivers, resulting in passenger time-savings by a factor of ten).

197 *See* eg Joined cases C-40 to 48, 50, 54 to 56, 111, 113 and 114/73 *Suiker Unie* ECLI:EU:C:1975:174 [1975] ECR 1663, para 173.

198 *See* notably *United States v Richfield Oil Corp* 99 FSupp 280, 291 (SDCal 1951) (finding that an oil company which structures its dealings with gas stations so as to evade labour laws cannot also escape antitrust scrutiny by then claiming that the significant control it exerts over them is akin to ownership). *See* also Case C-161/84 *Pronuptia* ECLI:EU:C:1986:41 [1984] ECR 353,

Granted, though, there are reasonable objections to such a conclusion.

2. Caveats

The theory of oppression laid down above is rather unwieldy. Worse still, there seemingly is little, if any, room for refinement lest we fall back into the snares which bedevilled our inquiries of freedom and coercion. Furthermore, while some may countenance the thought of a theory which invites a more inductive, empirical, approach, no one can deny this would pave the way for ad-hoc decision-making. Would Amazon merchants qualify as a "social group"? Where would we draw the line between restrictions that cumulatively amount to oppression and those which do not? How would we prevent outcome fairness from perverting the analysis? These are some of the ensuing questions to which there are no obviously satisfying answers. Plus, when confined to labour platforms, using the theory to justify enforcement would also betray paternalistic overtones. Platform labour is not a black or white experience; nor are its effects generalizable as empirical evidence suggests that many providers are satisfied with the status quo – some even relish it[199] – whilst others lambast their rivals for wanting the platforms to absorb all the risks of their activities.[200] Hence, rather than invoking oppression to underpin a case for active intervention, antitrust decision-makers may be wiser using it as a ground for "bold deference". More on this in Chapter 7.

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para 23 (finding that 'provisions which impair [a] franchisee's freedom to determine his own prices are restrictive of competition').

199 *See* Field and Forsey (2018) 12 (finding that some UK Deliveroo couriers value flexibility and income the platform provides). For similar findings regarding Uber/Lyft drivers in several jurisdictions, *see* Peticca-Harris, de Gama and Ravishankar [2018] 36, 42-52; Vacklavik and Pithan [2018] 0, 13; Malin and Chandler [2017] 382, 389-390; Calo and Rosenblatt [2017] 1623, 1641. Likewise, for cloud work platforms such as AMT, *see* Wood and others [2019] 56, 64-66; Graham, Hjorth and Lehdonvirta [2017] 135, 153; Dube and others [2016] 279, 286-290.

200 *See* the ethnographic work by Malin and Chandler [2017] 382, 386 (finding that several Uber/Lyft drivers within their sample expressed this opinion).

D) Summation

What is called "freedom", to borrow from Nobel economist Paul Samuelson, 'is really a vector of almost infinite components rather than a one-dimensional thing that can be given a simple ordering.'[201] As a stand-alone concept, it provides little to antitrust decision-makers wary of potentially despotic exertions by powerful autocratic platforms. Formalizing these anxieties as plausible "freedom-based" competition problems requires more heuristically pregnant concepts.

"Coercion" is one such notion which may offer a way forward, albeit perhaps a narrow one. "Oppression" is another. At the very least, it does put some legs to a rather startling idea, floated in a highly anticipated report, whereby antitrust enforcement may be warranted when 'a platform whose main strategic objective is to attract more individual users could provide attractive conditions on the consumer side by *sharing with them part of the benefits of its monopsony power on the business side*.'[202] Still, our oppression theory's unwieldiness and the ad-hocism it invites, combined with a lack of clear room for refinements, render it, at best, difficult to manage, and, at worst, open to capture.

Concluding reflections

Analogizing platforms to quasi-States is insightful. It enables policy-makers to see what is otherwise largely invisible and imbued with techno-progressive ideology: many platforms are akin to digital sovereigns, devising and enforcing institutions that shape our behaviours, interactions with others, and, ultimately, the distribution of value within their respective "territories".

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201 Samuelson (1966) 1414.

202 Crémer, de Montjoye and Schweitzer (2019) 62 (emphasis added).

Platform governance is evidently not a competition problem per se. More paradoxically for some, nor is its autocratic nature. When a powerful platform turns despotic, though, vigilant antitrust decision-makers may need to spring into action. Whether the tools at their disposal are honed enough then becomes a critical matter. So too is the fact that antitrust is not the only available policy levers. Both issues will be discussed in Part III.

For now, suffice it to note that despotic autocracy fears can, somewhat uncomfortably, be articulated within a "consumer welfare" rationale. Nevertheless, the multi-sided nature of some of these platforms, combined with an endorsement of those IO economists who specialize in them, can make potential competition problems more difficult to formalize.

Alternative theories more consonant with the liberal value of "freedom" can also be crafted under the "competitive process" paradigm. However, it must be cautioned that '[l]iberty does not mean all good things or the absence of all evils',[203] lest it become a Trojan horse for special interests.[204]

Upon deeper reflection, there is much to discuss over what the potentially "coercive", perhaps even "oppressive", exertions examined here reveal on the nature of platform capitalism and where it is heading. Is platform labour – a model which arguably only thrives in its present form due to (artificially induced) monopsonistic conditions on the supplier side and oblivious investors – really sustainable? Likewise, should we blithely laud the benevolence autocratic platforms like Amazon and Alphabet/Google seem to display towards consumers when it comes at the expense of the freedom and livelihood of many suppliers?

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203 Hayek (2011) 68.

204 Hayek (2013) 294, writing of "social justice".

Ultimately, these are all difficult questions, which boil down to what societies value most and the trade-offs they are willing to accept. As it pertains to antitrust, its role remains unclear. Yet, for polities committed to the creation of free, efficient, but also humane competitive economies, it cannot be that of a “night-watchman”.

CHAPTER 4. GAME-MASTERING

Introduction

Powerful platforms, we have seen, are very much akin to (quasi-) autocratic States that may veer towards despotism. When brought to their attention, our antitrust decision-makers should be able to spot the competition problem in this. But "looking up" is by no means straightforward. With "consumer welfare" lenses, the exercise is counter-intuitive, indirect and error-prone; switching to the "competitive process" perspective creates new challenges decision-makers may be reluctant to embrace, even if doing so does eliminate the discomfort of having to look down first.

This chapter turns to a separate matter – the possibility that powerful platforms engage in what is denoted here as "game-mastering". The vernacular choice is not Orwellian doublespeak; the concerns *are* fundamentally distinct. To appreciate the difference in optics, let us begin by (i) briefly explaining in what sense analogizing platforms to game-masters can be meaningful for present purposes and by (ii) describing the types of claims that, accordingly, may be of interest (Section 1). As we shall see, game-mastering acts as an umbrella notion, encapsulating a variety of allegedly harmful strategies. Once again, though, "consumer welfare"-minded decision-makers can make them out as potential competition problems. The real issue pertains to the need for rigour, which will often place them between a rock and a hard place when they attempt to formalize their theories of harm (Section 2). However, this is not to say reorienting antitrust towards protecting competition as such necessarily provides a simple panacea. Befitting what Chapter 3 uncovered for despotic platforms, this alternative policy lens does make "looking up" a more straightforward exercise. Yet, rendering the affected value – ex-ante fairness – intelligible presents challenges

many may not be up for (Section 3).

Section 1. Game-mastering platforms

A) Platforms as game-masters

Those familiar with role-playing games (RPGs) will have surely come across the figure of the game-master. From traditional pen-and-paper (or tabletop) RPGs (like *Dungeons & Dragons)* to massively multiplayer online (MMO) ones (say, *World of Warcraft)*, they are often unavoidable. Game-masters have also become synonymous with many functions.[1] Dictating the narrative flow (by giving dynamic feedback to the actions of players) is one. Enforcing the rules of the game established by the creator (who may incidentally be the same person) is another. Game-masters also develop the environment within which the game unfolds and ensure constant player engagement.[2]

These responsibilities assuredly evoke those assumed by platforms. Like game-masters, the latter provide an environment – the digital infrastructure – which they must nurture through incremental (or, sometimes, radical) design changes to attract users and keep them on board. They, too, are also in charge of policing user behaviour.

Still, leaving it at this would be deeply unsatisfying; the analogy would add little to our discussion in Chapter 3 where platforms' regulatory tendencies were likened to private autocratic governance. To shed light on the novel optic introduced here, it is therefore useful to turn to the gaming ethnographers who find that RPG game-masters occasionally '"fudge" the rules without the players being aware'.[3] To be sure, "fudging" often aims to protect the spirit of the game.[4] Sometimes, it is more accidental than

1 *See* Tychsen and others (2005).
2 ibid 215-16.
3 Denny (2010) 10.
4 *See* Glas (2012) 161-163.

malicious.[5] Now and again, however, game-masters purposely set out to covertly endow a particular (group of) player(s) – perhaps even their own – with a potentially significant competitive advantage.[6] As explained below, similar dynamics unfold in the context of powerful platforms.

B) The claims

Right off the bat, we must recognize that our discussion pertains to conduct which may be difficult to detect. Game-mastering, as understood here, is not about the ostensible rules platforms may devise – an issue just examined in Chapter 3; it rather relates to practices that covertly undermine those rules or at least deviate from their spirit. Nevertheless, significant anecdotal evidence and a growing body of serious empirical research suggest that the phenomenon is real and worth careful consideration.[7]

So, what kind of game-mastering claims might land on the antitrust decision-maker's docket? To my mind, three subcategories can be usefully conceptualized.[8]

The first is labelled "self-preferencing".[9] It pertains to situations where a powerful, integrated, platform is accused of anticompetitively favouring its in-house products within the platform infrastructure where it thereby acts as both a game-master and a player. What is initially a purely vertical competition thereafter acquires a horizontal dimension. Ubiquitous and perhaps benign prima facie, antitrust agencies and courts are nonetheless increasingly swamped with such allegations levelled against

5 For a "notorious" example which even caught the eye of top legal blogs, *see* Guadamuz (2009).

6 *See* Glas (2012) 161-163. The reality of this problem explains why some developers not only provide rules that explicitly prohibit such game-mastering tactics, but also adapt the environment of the game itself when the game-master also acts as a player (*see* eg Montgomery (2018) 36).

7 *See* what follows in this subsection. *See* also Section 2 below. For ways to empirically identify some of these practices, *see* eg Edelman [2011] 16.

8 Figure 4.1 provides a summary.

9 To my knowledge, the label was coined by Raff and Raff (2011).

the likes of Alphabet/Google,[10] Facebook[11] and Amazon.[12] Given the behaviour's salience, other platforms should probably brace themselves for similar scrutiny or take preventive measures.[13]

The second type of potentially unnerving game-mastering examined here arises when a powerful platform claiming neutrality actually engages in what is denoted as stealth "kingmaking".[14] To me, this moniker captures best what some decision-makers and commentators seemingly have in mind when they fret over platforms' furtively:

— (i) granting better conditions in terms of visibility and/or sale optimization to potentially lousy providers willing and able to offer due consideration for the benefit; or

— (ii) demoting suppliers loath to loosen their purse strings or whose interests are simply misaligned with those of the platform.[15]

Platforms like Amazon and Facebook unsurprisingly appear as prime suspects.[16] Yet, others less in the limelight – say, the powerful OTAs, Booking Holdings and Expedia – might be just as, if not more, worthy bogeymen.[17]

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10 To date, complaints have focused on the way the firm (i) favourably displays and/or positions its vertical search services (such as Google Shopping, Google Maps, Google Local+, etc) in the organic results of its general search platform infrastructure (Google Search); and/or (ii) artificially demotes rivals. *See* eg CMA (2020b) Appendix P, paras 52ff.

11 *See* eg ACCC (2019a) 134-136 (providing multiple illustrations).

12 *See* eg BWB (2019) (investigating Amazon for allegedly trying to 'inordinately favour its own products' by, for instance, covertly demoting merchants in its marketplace rankings or by adding incorrect delivery details to their accounts).

13 In July 2019, Apple was reported to have tweaked its App Store algorithms to prevent them from systematically presenting the platform's own apps first (*see* Nicas and Collins (2019)).

14 Others have used the more cumbersome idea of 'selling monopoly power' (*see* Crémer, de Montjoye and Schweitzer (2019) 64).

15 *See* eg Stigler Committee (2019) 73 (expressing concern about how 'the platform's whims can determine [the vendors] future').

16 The Italian competition authority is investigating Amazon for precisely this concern (*see* Larger (2019)). In the UK, the DCMSC invited the CMA to investigate Facebook to determine, inter alia, whether the platform is 'unfairly using its dominant market position in social media to decide which businesses should succeed or fail.' (DCMSC (2019) 42).

17 Hereinafter I shall refer to "OTA bias". *See* ECN (2017) para 50 (reporting such complaints by hoteliers in the EU).

Finally, game-mastering claims may relate to *how* platforms *enter* (or, in the argot of business academics, "envelop"[18]) the spaces occupied by some of their providers. In a nod to the gaming culture, let this be christened "data-twinking". For justificatory purposes, a slight digression into media studies is apropos.

In the context of MMORPGs, generic twinks are characters who begin the adventure with gear and/or abilities they would normally not have been able to possess on their own.[19] Twinking, in its most basic form, thus 'involves using accumulated wealth and/or power of a high-level character to boost the performance of a low-level character.'[20] A variation of the practice is deployed in dedicated competitive settings where the twink gains an upper hand over rivals as a result.[21] Suppose, then, that the player is also a game-master, a status associated with a God-like view of the game. Based on such knowledge, (s)he could easily create a player-character enhanced by inception with insights unavailable to others and without them even being aware of this. To wit, leverage panoptic omniscience over the games (s)he exclusively oversees to make strategic decisions as players – to "data-twink".

Returning to platforms, the label's fit should be more apparent. Does it not capture the worries expressed by certain critics and competition authorities regarding Amazon's alleged exploitation of the data it (purportedly) extracts from sellers using its marketplace platform to drive its private-label activities at their expense?[22]

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18 *See* Eisenmann, Parker G and Van Alstyne [2011] 1270 (theorizing "platform envelopment"). *See* also Lan, Liu and Dong [2019] 943 (extending the envelopment theory to *within*-platform situations).

19 Glas (2012) 103.

20 ibid.

21 ibid.

22 *See* EC press release (IP/19/4291); Khan [2017] 712, 785-86.

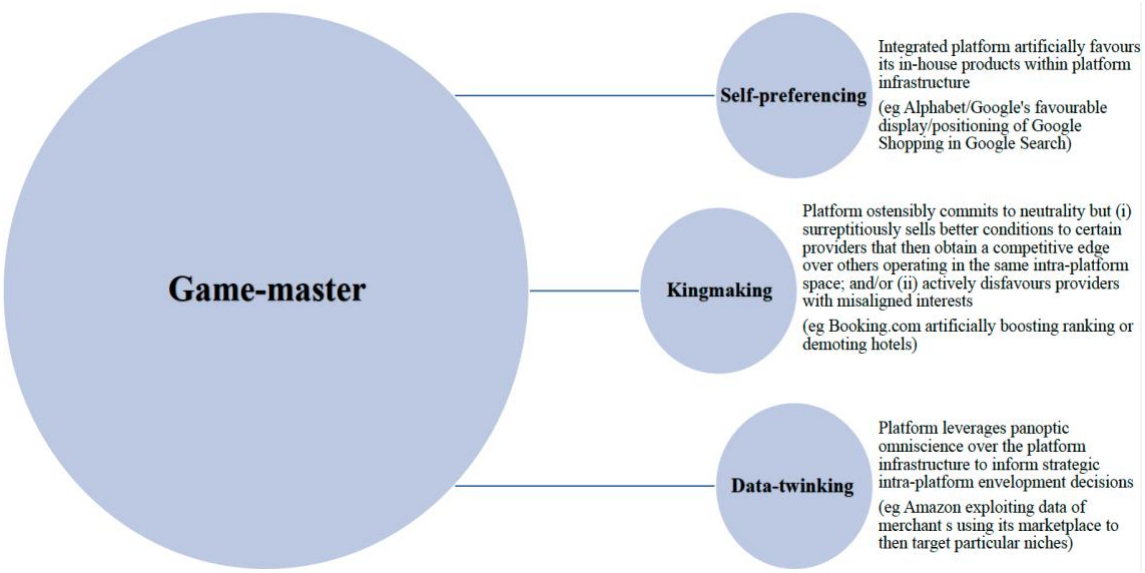

Figure 4.1 *Game-mastering: summary figure*

Given these considerations, one should have a better sense of the distinct dynamics this chapter aims to discuss. The question, then, is: can we rationalize them as potential competition problems? Let us examine it taking a "consumer welfare" perspective first.

Section 2. Game-mastering and "consumer welfare"

Chapter 3 introduced the reader to the strands of economics antitrust decision-makers might appeal to when confronted with claims of despotic autocracy, in particular that of multi-sided markets. Occasional paucity of theoretical and empirical work, though, meant that part of our discussion there had to be guided by general insights and, to a certain extent, more intuitive "consumer welfare" reasoning. With game-mastering tactics, economists have slightly more to say. Depending on where one stands, we shall see that this can be either a boon or a bane. Kingmaking, self-preferencing and data-twinking practices, it will be explained, *can* tick off "consumer-welfare"-minded decision-makers. Yet, their upgaze will, again, regularly be coloured by:

— (i) the endorsed "consumer welfare" avatar, ie total surplus,[23] consumer surplus,[24] *strong* consumer surplus,[25] or consumer choice/sovereignty;[26]

— (ii) the type of (economic) insights considered; and

— (iii) the (value-) judgements one needs to make when confronted with sometimes contradictory models that (more often than not) generate ambiguous predictions.

With this in mind, let us begin with "kingmaking".

A) Kingmaking

That a powerful platform not only can, but might also have the incentive, to covertly skew the way it ranks and/or presents its suppliers to consumers seems instinctively troubling. Allegations of OTA bias serve as a useful backdrop for the discussion.

1. Incentives?

Booking platforms operated by the likes of Booking Holdings and Expedia are generally viewed as brokers facilitating deals between consumers and hoteliers.[27] As noted in Chapter 3, standard multi-sided market economics suggests that these firms must cater to all sides. Much like Chicago economists would have in their heydays, one could therefore argue that kingmaking is a spurious problem because it just does not make for rational business. Differently put, powerful OTAs would have no incentives to fiddle with their search algorithms to either favour hotels willing to pay higher commissions or demote those insisting on lower agency fees. How so? Are hotel

23 Or Kaldor-Hicks efficiency measured through short-run price/output effects.

24 Measured through short-run price/output effects and infused by considerations of outcome-oriented distributive justice.

25 Which also accounts for quality, choice, diversity, and innovation considerations.

26 Which is similar to strong consumer surplus but reflects concerns for corrective justice.

27 *See* eg Larrieu (2019) 18-19; *Booking.com* (Case 13/0045F) ADLC Decision 15-D-06 21 April 2015, para 98.

suppliers not notoriously dependent on these platforms to access consumers?[28] Surely, exploitation must be around the corner.[29] The answer, to borrow from one competition agency, is simple: 'consumers would quickly notice if [say, Booking.com] is not providing an unbiased picture of the offerings it compares and its usage by consumers would decline as they could switch to using other alternative websites.'[30]

Yet, a group of economists has recently debunked this argument.[31] Indeed, their study empirically demonstrates that, for a given hotel price offered on either Booking.com or Expedia, a more competitive price at the other OTA or on the hotel's own website led to a lower ranking. In their words, 'OTAs make the ranking of their recommended search results dependent on factors that are relevant for the OTA to maximize its profit, but arguably not to maximize the match value of customers.'[32]

2. Harm?

Powerful OTAs thus do have a profit-maximizing incentive to selectively make or break hoteliers. Being the masters of their online booking infrastructures, they also possess the ability to do so. What, however, is the potential "consumer welfare" harm from this? For can we not say "kingmaking" is no different to what the (in)famous Robinson-Patman Act forbids in the US, namely second-line price discrimination? As antitrust lawyers know well, almost everyone denounces this piece of legislation. Not only since it bans practices which are generally found to be allocatively efficient and pro-consumer,[33] but also because it demonstrably has negative effects on competition

28 For a study, *see* Stangl, Inversini and Schegg [2016] 87.
29 *See* eg Elmas (2018).
30 *Priceline.Com/Kayak* (Case ME/5882-12) OFT Decision 14 May 2013, para 91.
31 Hunold, Kesler and Laitenberger [2020] 92, 100ff.
32 ibid 111.
33 *See* Antitrust Modernization Commission (2007) 317ff.

and consumers.[34]

The informed observer, though, has a retort. OTA bias might:[35]

— (i) push hoteliers to pass on inflated agency fees down to consumers through hiked-up room rates;

— (ii) perpetuate market norms whereby consumers book through OTAs despite the availability of cheaper alternatives, such as the hotelier's own website;

— (iii) impair consumers' ability to effectively exercise their freedom of choice; and/or

— (iv) diminish hoteliers' incentives to improve their existing offerings (for instance, through property upgrades) or to expand their business in ways that would increase consumer choice and drive down room prices.

These points do fit the "consumer welfare" narrative to a tee. Still, in the eyes of rigorous antitrust decision-makers, such intuitive theories might not stack up to the contradictory body of economic evidence accumulated over decades, albeit in a context of analogue competition.

That said, can we formally rationalize the anxieties generated by our kingmaking OTAs? The answer is "yes", and one need not appeal to IO experts to do so.

Marketing economists have taken a keen interest to the issue. According to one recent, formal, study, a monopolistic OTA will likely rank (or more prominently display) hotels with the highest room prices, intermediation fees, and conversion rates (ie booking likelihood). The reason? Doing so enables the platform to indirectly mimic

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34 *See* Bulmash [2012] 361 (empirically finding that the legislation 'helps to maintain coordinated competition between suppliers, increases the free-rider problem, keeps monopoly prices high, and harms horizontal as well as vertical competition.')

35 *See* Edelman (2017) 5-6.

the effects of price parity clauses (PPCs).[36]

This matters given that PPCs have attracted considerable antitrust and legislative scrutiny over the past decade, especially in the EU.[37] And while the jury is still out on the full "consumer welfare" implications of these types of vertical restraints,[38] there is enough to substantiate significant concern, even where they are of the supposedly less harmful genre. PPCs – wide *and* narrow – sometimes soften competition between OTAs.[39] When they do, hoteliers pay higher commissions, which they probably pass on to consumers.[40]

Interestingly, a recent empirical study, which analysed the short- and medium-run impact of absolute legislative bans on these contractual devices in France and Italy, supports the theory. These interventions, its authors find, resulted in significant price reductions for consumers.[41]

Returning to kingmaking, what can we infer from this? By surreptitiously fiddling with their search algorithms, powerful OTAs can fly under the radar – especially where PPCs have been banned (either outright or through voluntary commitments). Doing so enables them to induce hotels into inflating room rates on competing channels (such as their own website), which is something any "consumer welfare"-minded antitrust decision-maker should frown upon.

Worryingly, the same economists further argue that behaving this way could,

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36 *See* Hunold, Kesler and Laitenberger [2020] 92, 95ff. The authors conjecture that a richer model involving competing OTAs would lead to similar outcomes.

37 For a brief overview, *see* ibid [2020] 92, 95.

38 *See* eg Vergé (2019) 49, 51-53.

39 "Narrow" PPCs are often portrayed as less harmful because they only prevent hotels from offering better terms on their own website(s). By contrast, "wide" PPCs also forbid hoteliers from undercutting the OTA on any alternative distribution channel. However, as Hunold and others [2018] 542 show, the former can be just as pernicious. *See* also the references therein at 545-546.

40 ibid.

41 *See* Mantovani, Piga and Reggiani (2020) (finding a 2.6% and (up to) 6% decrease in short-run prices in Corsica and Sardinia. In the medium-run, prices decreased less, though this depended on the type of hotel (chain vs independent)).

theoretically, be in the long-term interest of powerful OTAs, even if it means sacrificing short-run profits.[42]

Hence, despite the absence of any likely exclusionary effects, "consumer welfare" *is* potentially at stake. Consumer surplus might be harmed through inflated hotel prices; total surplus may well take a hit if overall output dips (should higher room rates push consumers towards alternative short-let accommodation providers or deter them from travelling altogether); and there will definitely be losses in both *strong* consumer surplus and (effective) consumer choice as kingmaking entails consumers will not be served with their best-matching search results, which is akin to a decrease in quality.

To be sure, some may say the latter effects – consumer deception – are better dealt with through consumer protection law, since they really reflect an information asymmetry problem.[43] But this relates to an issue examined later in Chapter 7, namely that of policy interfacing.

The preceding notwithstanding, there is another model which usefully serves our rationalizing purposes here.[44] It shows that when an OTA ranks hotel listings under a *utility-based ranking* – ie one which sorts results according to consumer's idiosyncratic preferences or "match value" – consumer surplus *rises* by an average of $30.24 when compared to *Expedia*'s ranking.[45] Ergo, whenever a powerful OTA does not deliver consumers with their best-match hotels, there is potentially lost consumer surplus flowing from unrealized utility gains generated by better matches and from

42 *See* Hunold, Kesler and Laitenberger [2020] 92, 111.

43 In the UK, the CMA tackled kingmaking OTAs for exactly this reason and relied on consumer protection law to do so (*see* CMA press release (2019)). *See* also Patterson (2017) 123 (seemingly recognizing this point).

44 Ursu [2018] 530.

45 ibid 548-549.

increased consumer search costs.[46] These results can be explained by a demonstrable "position effect". That is, consumers are less willing to click on lower ranked hotels (although this does not affect their final purchasing decision).[47]

More interestingly still, the study clarifies how Expedia would itself benefit by adopting a utility-based ranking. In short, the number of transactions occurring within its booking infrastructure would increase, which should further stoke the virtuous cycle of cross-sided network effects.[48] Assuming one expects OTAs like Expedia to serve consumers with their best matches, kingmaking is, hence, potentially inefficient as well.[49]

3. Endemic?

So far, the focus has been on kingmaking OTAs. The point was to underscore again that our anxieties need not be tied to "super-platform" status. However, can the foregoing insights be generalized? What if, say, musicians (or, perhaps more realistically, their record labels) complained about skewed playlists on Spotify, the current leader in music streaming?[50] To rephrase: what if the "Payola" issue, which has long plagued the radio industry, was morphing into something more insidious in the digital age?[51]

The suggestion is not mere fearmongering, despite the firm's "playlist neutrality" pledge.[52] Some cultural economists have already examined the effects of the

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46 ibid.

47 ibid 538ff.

48 ibid 548ff (finding an increase of at least 2.4%).

49 For similar findings, *see* Chung (2019) 47-49 (finding a 25% increase in consumer surplus under a utility-based ranking when compared to an Expedia ranking; and arguing that '[o]ne possible explanation for this difference is that Expedia places hotels with higher commission rate for itself on the upper part of the results page, leading consumers to make clicks on those hotels due to the position effect.')

50 *See* Sisario (2017).

51 Payola is jargon for manufacturing popular hits by paying for radio play. *See* generally Kelly (2016).

52 The firm has stated that it is 'absolutely against any kind of "pay to playlist", or sale of playlists.' (Cookson (2015)).

platform's playlists on both the promotion of songs and their discovery.[53] Fortunately, their findings are mostly positive. Yet, they do caution that growing concentration in music streaming places an increasingly large degree of power in the hands of a few businesses which may have kingmaking incentives.[54]

The reason is that playlists are progressively replacing DJs as the 'new musical starmakers'.[55] Being listed – preferably highly – on the most popular ones boosts, sometimes substantially, the number of times an artist's work is streamed.[56] Recommendation systems, in other words, affect what consumers listen to and thus the success of artists. Spotify, though, operates and curates nearly all the hit playlists on its streaming infrastructure. And since its revenue-generating business relies on a one-sided retailing model,[57] the firm could choose to favour cheaper content to induce content providers into trimming licensing fees. That is, promote music for which it pays lower royalties to gain an upper hand over (major) record labels like Universal, Sony and Warner. Again, this is not science fiction; economists have modelled the theory.[58]

But what about the "consumer welfare" harm? Economic models (as noted in Chapter 3) are often sensitive to departures from the defined parameters. Given their underlying assumptions, we evidently cannot seamlessly apply to music streaming the narratives discussed in the OTA context. Unlike Booking.com, Spotify is indeed more retailer than broker; and, contrary to hotels, music providers compete within the platform exclusively on quality, not prices.

Granted, formal studies examining kingmaking under slightly more compatible

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53 *See* Aguiar and Waldfogel (2018).

54 ibid.

55 Iqbal (2019).

56 Aguiar and Waldfogel (2018) (noting that this is true even for established artists).

57 Spotify's money-making venture is the one-sided streaming platform, which involves acquiring licences over content that is then distributed to subscribers who pay a rate set by Spotify. The firm also runs a freemium version of its service, which is effectively a multi-sided platform subsidized by advertisers.

58 *See* Bourreau and Gaudin (2019).

assumptions do exist.[59] Even if we bracket the questionable ones which remain,[60] though, these models tend to suggest that "consumer welfare", however understood, will improve, rather than decline. At worst, effects become ambiguous if one accounts for informed intuitions regarding investment incentives.[61]

Of course, in line with what Chapter 3 claimed, speculating over how Spotify's (allegedly) biased playlists might harm "consumer welfare" in other ways is always possible. Favouring cheaper content in a bid to drive royalty prices down surely might, for example, be chastised for its potentially quality-decreasing and/or innovation-depressing consequences. Yet, even these stories sound flimsy here.

Firstly, pegging music quality to its acquisition price seems somewhat incongruous. Consumers often have idiosyncratic tastes when it comes to music[62] and content quality is notoriously unpredictable.[63] If kingmaking favours the discovery of artists whose talents were overlooked by the majors, the practice might just as well be portrayed as pro-quality, pro-choice and pro-diversity.

Secondly, even if the "expensive-is-better" premise is accepted, one must then clarify whose interests antitrust should be protecting when guided by broader variations of "consumer welfare". For the upstream providers our powerful streaming platforms like Spotify are bargaining with are the (major) record labels, not the artists. These *intermediaries* are (often) not exactly minnows. More importantly, they are the ones controlling the livelihoods of real creators. The point, therefore, is to draw attention to the uncritical assumption some may hold whereby musicians' incentives to "innovate"

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59 For a detailed survey, *see* Krämer and Schnurr [2018] 514, 518-523. The authors posit that insights from this literature can be applied beyond general search engines because all platforms organize provider offerings.

60 For instance, monopoly at the platform level is assumed and content quality is often treated as exogenous (ie causally independent from other variables in the model).

61 *See* Krämer and Schnurr [2018] 514, 522 (observing that these models predict increases in consumer and total surpluses).

62 *See* Datta, Knox and Bronnenberg [2017] 5, 6.

63 *See* Waldfogel (2018) 11ff; 168ff.

are vicariously tied to those who market their work. More on this in the next chapter.

So, what is the takeaway from the discussion? The key message is that "consumer welfare"-centric antitrust need not be visually impaired when confronted with claims of platform kingmaking. Harmful effects can be theorized, sometimes formally. Nevertheless, not all kingmakers are invariably bad from this perspective. Caution may thus be justified when it comes to enforcement, something we shall return to in Part III. What about "self-preferencing" platforms, though?

B) Self-preferencing

To many policy-makers and their expert advisers, self-preferencing tactics are the poster children for abusive conduct in the platform economy. But, insofar as "consumer welfare" remains the paradigm, is obloquy warranted? Might it not even be argued again that, if these platforms are truly guided by their lust for profits, self-preferencing would just be irrational?

1. Incentives?

Economists are regularly at loggerheads when it comes to explaining the profit-maximizing logic behind platform practices. With self-preferencing, however, compelling evidence suggests it does occur.[64] Yet, some would effectively deny this, relying on (their own interpretation of) multi-sided market theory and leveraging economics.[65] Self-preferencing, by their account, is irrational as it would prompt consumers to switch away to rivals and thereby disrupt the virtuous cycle of network effects that make or break any platform.[66] Businesses like Alphabet/Google should,

64 *See* eg Mattioli (2019) (reporting how Amazon engineers were pressured into skewing Amazon's search algorithms in favour of in-house products).

65 *See* Bork and Sidak [2012] 663, 674 ('The economics of two-sided markets cannot be over-emphasized in this case.')

66 ibid 674-675.

moreover, have no such incentives because of the so-called "single monopoly profit theorem" (SMPT). Either the platform infrastructure (a general search engine, for instance) and the products it supports (say, vertical search services) belong to vertically related markets in which case only one monopoly is available for extraction (upstream or downstream); or the products are complements so leveraging would be irrational since the platform would be renouncing profits from its core product (here, general search).[67]

Now, several formal economic models do put the incentives issue to rest.

Some are specific to self-preferencing by a monopolistic general search platform like Google Search and defeat objections based on multi-sidedness and the SMPT. To keep things brief, such a platform might well bias its organic search results to favour its in-house verticals when the upsides outweigh the risk of consumers switching to a rival (say, Bing).[68] Vertical search services, furthermore, are themselves multi-sided platforms. This creates the conditions for defeating the SMPT as it expands the set of customers from which new rents can be extracted. More prosaically, Alphabet/Google can squeeze monopoly profits, not only from advertisers on Google Search, but also from, say, fee-paying businesses who use Google Maps.[69]

Other economists prove that self-preferencing is rational in many different contexts, including those where the platform acts as a (single-sided) retailer. Yes, provided consumers are very insensitive to bias, Netflix does have a profit-maximizing incentive to skew the personalized recommendations it makes to consumers to favour

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67 ibid 675-677.

68 Tarantino [2013] 1.

69 *See* Choi and Jeon [2020] (forthcoming); Iacobucci and Ducci [2019] 15, 34-39. Another key aspect of these models is the assumption that the favoured in-house vertical cannot be subjected to negative prices (which therefore prevents rivals from bribing consumers into using their services instead). *See* also Eisenmann, Paker and Van Alstyne [2011] 1270, 1280 (applying the seminal model by Whinston [1990] 837 to argue that platform markets routinely violate the narrow conditions under which the SMPT holds true).

its in-house productions[70] (perhaps, *House of Cards*).[71]

In sum, self-preferencing can be rational for powerful integrated platforms. The broader point, though, is that conflicting insights from economists once more run the risk of confounding antitrust decision-makers (ostensibly) committed to protecting "consumer welfare". As the landmark EU *Google Search (Shopping)* decision illustrates, this in turn can lead even the more resourceful and technically competent ones into making oddly reasoned conclusions.[72]

2. Harm?

The incentives to self-preference are there. However, what are its potentially harmful implications for "consumer welfare"? For discursive purposes, let us focus on Alphabet/Google, which, in the decision just mentioned above, became the first platform condemned for behaving this way.

a) (Informed) informal theories?

The facts behind the landmark ruling are well known: Alphabet/Google was found to have infringed EU antitrust law by favouring its comparison-shopping service – Google Shopping – in the organic results of its general search engine – Google Search. How? By fidgeting with its ranking algorithms and by displaying its in-house comparator in a more attention-grabbing way than those of third parties.

Having recalled this, note that, while publicized with "consumer welfare"

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70 Bourreau and Gaudin (2019) (sensitivity to bias depends on the magnitude of consumers' utility loss resulting from biased recommendations. The higher the magnitude, the more consumers are sensitive to bias).

71 *See* Carr (2013).

72 Indeed, in one instance, the EC tell us the decision is underpinned by well-established leveraging principles (*see Google Search (Shopping)* (Case AT.39,740) European Commission Decision 27 June 2017, para 649). Yet, the authority advertises it as a novel precedent (*see* EC press release (IP/17/1784)). To my mind, either a practice is familiar, in which case it falls to be analyzed against relevant existing frameworks; or it is novel, in which case a finding of illegality establishes a precedent the decision-maker needs to motivate by articulating a convincing analytical roadmap. Whatever the case may be, the EC does neither.

rhetoric, the decision's actual content suggests the EC was rather focused on protecting competition, as such.[73] Incidentally, there was little ambiguity back when then-Commissioner Joaquín Almunia was at the helm; at the time, the expressed concern was clearly related more to "fairness" than to "consumer welfare".[74] Nevertheless, assuming for argument's sake that the authority was in fact committed to some understanding of "consumer welfare", what might the theory of harm have been?

In a peer-reviewed paper published almost a year after the (redacted, full-text) decision became publicly available, the EC's own economists shared some interesting insights on this question. According to them,

> The Google Shopping decision is a leveraging abuse case. Google used its dominance in the market for general search services to give its comparison shopping service an artificial advantage and *exclude* competing comparison shopping services, which leads to anticompetitive *foreclosure*. […] The anticompetitive *foreclosure is established* in the Decision by the *likelihood* of having negative consequences on competition.[75]

The quoted passage makes sense; foreclosure certainly is the bread-and-butter narrative of antitrust's contemporary enforcement agenda against single-firm abuses.[76] But there is a hitch in claiming that the EC *established* it, even to a standard of *likelihood*. What *is* demonstrated is that (i) web traffic – be it generally or referred from Google Search – is needed to compete in the shopping-comparison industry;[77] (ii) actual and lasting traffic diversion ensuing from Alphabet/Google's self-preferencing did occur;[78] which means (iii) other vertical search providers could *potentially* be

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73 cf EC (2017) 4 (describing the case as one of 'widening choice for consumers') with *Google Search (Shopping)* (n 72) paras 331-332, 667 (tying it to EOp and the protection of competition, as such).

74 *See* Almunia (2014) ('Our concern was that [rival verticals] could be significantly less visible or not directly visible, leading to an *undue* diversion of internet traffic.') (emphasis added)

75 Amelio and others [2018] 653, 661 (emphasis added).

76 *See* eg EC [2009] OJ C45/7.

77 *See Google Search (Shopping)* (n 72) paras 445-451, 542-588.

78 ibid paras 452-541.

excluded.[79]

Some commentators, however, claim that 'many – if not most – of the comparison shopping sites in question have stayed in business'.[80] If this is true, the statement that foreclosure was established should strike "consumer welfare"-minded advocates as 'naïve',[81] even if a low(er) threshold of probability was accepted. Needless to say, absent (likely or actual) exclusion, "consumer welfare" harm in the form of decreased choice, higher prices and reduced innovation can only be inferred through (informed) *intuition*.[82]

To be sure, there is a quality narrative to be spun, one that would fit within the *strong* consumer surplus and consumer choice variations of the paradigm – remember, Google Shopping was deemed inferior to existing alternatives.[83] And the EC did invoke an *effective* consumer choice rationale.[84] Still, if the case really was about correcting consumer deception, one would have expected some explanations on two fronts. Firstly: why was EU consumer protection legislation considered inadequate or irrelevant? Secondly (perhaps more importantly): why was a transparency-oriented remedy deemed insufficient?[85]

In sum, if "foreclosure" truly was the theory of harm supporting the *Google Shopping* decision, it definitely was not formalized, nor was it tested to a high standard

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79 ibid para 593.

80 Akman [2017] 301, 363.

81 Wright [2012] 1163, 1163.

82 *See Google Search (Shopping)* (n 72) paras 593-594 ('the Conduct has the *potential* to foreclose competing comparison shopping services, which *may* lead to higher fees for merchants, higher prices for consumers, and less innovation'; potential 'higher costs for merchants are *capable* of leading to higher product prices for consumers) (emphasis added). Although the EC does more to substantiate dynamic efficiency harms, the decision falls short of what formal reasoning requires (*see* eg Colomo [2016] 201, 215-216)

83 *See Google Search (Shopping)* (n 72) paras 490-491.

84 ibid para 599 (underscoring the deceptive nature of the behaviour on consumers).

85 Transparency remedies were actually considered when the case was being pursued under the consensual commitment procedure. But the way the EC addresses their insufficiency is either missing (*see* ibid para 129) or shows that the concern was unrelated to effective consumer choice (*see* ibid paras 127-128, highlighting fairness-related worries).

of probability.[86]

Admittedly, our purpose here is merely to verify whether we can rationalize self-preferencing as a potential competition problem. By this measure, the preceding discussion maybe only highlights an issue of rigour, not a defect in the "consumer welfare" paradigm. And, if (informed) intuition is the best we have, perhaps this should be reflected in how our competition laws are *enforced*.

Enforcement, though, is a separate matter, one we address in Part III. Besides, reliance on informal theories can generate inconsistencies that may ultimately undermine them altogether. The one targeting Alphabet/Google is a case in point. The same narrative – ie traffic importance, combined with the idea whereby traffic diversion equals foreclosure, which in turn leads to "consumer welfare" harm – was deployed in the early-2010s by the FTC in nearly identical factual circumstances. As is well known, no liability was incurred.[87] According to the authority, evidence supported the conclusion that the contentious conduct likely *benefitted* consumers through the improvements of their search experience. These gains, it stated, outweighed the negative impact the practice surely did bear on rival vertical search providers.[88]

Intuitive foreclosure reasoning can hence breed confusion. Not that other theories of harm to "consumer welfare" are inconceivable. In India, for example, the CCI held that Alphabet/Google's self-preferencing of its Google Flights vertical "unfairly" deprived consumers of additional choices.[89] What is the underpinning logic,

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86 Actually, the concept of "foreclosure" only appears once in the decision (*see* ibid para 593).

87 FTC statement (2013a).

88 ibid 2-4. An insightful confidential report drafted by the FTC's legal staff (which was released under the Freedom of Information Act to the *Wall Street Journal*) seemingly dovetails with the stance adopted by the Commissioners (*see* FTC Bureau of Competition (2012) 78 ff). However, caution is warranted. Indeed, only the report's even pages were published. Some of the missing odd pages contained information relating specifically to self-preferencing and may have thus qualified the staffers' conclusions.

89 *Matrimony.com Limited vs Google LLC & Others and Consumer Unity & Trust Society (CUTS) vs Google LLC & Others* (Joined cases 07 and 12/2012) CCI Decision of 8 February 2018, para 420. The CCI ruled on a plethora of claims (which the decision makes difficult to number

though? The question must be raised as the agency's order is quite perplexing.

For one, the operative discussion reveals a potpourri of (at best mildly substantiated) narratives. None explains how *consumers* were "unfairly" treated because of the behaviour.[90] And while the "disclaimer" remedy imposed by the CCI provides a hint,[91] this cannot distract from the fact that what is then a consumer deception (or *effective* consumer choice) case is not reasoned as one.

For another, the only part of the decision which does address the substantive conclusion of unfair potential losses in consumer choice (through the foreclosure of competing flight comparators) confoundingly conflates two issues, namely justice to consumers and that which might be owed to rivals – be they vertical or horizontal – under antitrust.[92] Yet, if the matter was really about fair competition, the CCI should have bitten the bullet instead of using the "consumer welfare" lodestar as a smokescreen.

The takeaway from the discussion is accordingly simple: although one can frame self-preferencing as a potential competition problem, (informed) intuitive

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accurately). Ultimately, the agency rejected all but three claims: self-preferencing of Google Flights, prefixing the ranking of Universal Results, and exclusivity requirements imposed on publishers using its AdSense service – the latter two pertaining to practices that had (long) been discontinued.

90 *See* ibid paras 231-253. There are two *defensive* leveraging narratives: diversion of indispensable traffic might (i) lead rival flight comparators to purchase (additional) Google keyword ads whose costs might then increase (para 248); and (ii) enable Alphabet/Google to 'collect more user data to reinforce its advantage in search advertising' (para 249). One also finds an *innovation* theory: rivals, deprived of consumer data they might otherwise have harvested, may no longer be able to innovate on their products (para 249). Finally, the CCI advances an *offensive* leveraging story: traffic diversion could lead to the foreclosure of (equally efficient) rival verticals thereby enabling Alphabet/Google to displace them (paras 248 *juncto* 253). Only the latter is explicitly tied to the substantive conclusion whereby consumers are potentially deprived of additional choices.

91 At para 422, the CCI orders Alphabet/Google to cease misleading consumers by displaying an appropriate disclaimer.

92 At para 253, the CCI states that its 'comprehensive examination' revealed that third-party flight comparators might be foreclosed due to the 'unfair diversion of traffic' caused by the behaviour. But how can it be inferred from this finding that *consumers* might have been *unfairly* treated? To repeat, there may be injustice in the fact that consumers (who believe Alphabet/Google is true to its promise of unbiased results) might be misled into clicking on the platform's prominently positioned/ranked in-house verticals. But this is not what the CCI argues.

theories can sometimes be poor guides. The latter may, moreover, be deployed to mask fears which have little to do with "consumer welfare".

b) Formal theories?

To date, decision-makers have rationalized the harm from self-preferencing without relying on formal economic analyses. Yet, what advice would the economist give them today? The quick answer is: "it depends". Like our other earlier-discussed upstream power plays, several game-theoretic studies dissect self-preferencing tactics. And each model comes with distinct assumptions that will sometimes alter the diagnosis even when the defined parameters are not (or at least do not seem) drastically different. Again, our *Google Shopping* case serves as a good illustration.

Inspired by the EC's decision, some economists have attempted to formalize the foreclosure theory by analogizing self-preferencing to bundling. A pair of them tells us exclusion of as efficient vertical search providers is a credible outcome.[93] These economists' "consumer welfare" predictions, however, are ambiguous. In the baseline model, providers' profits are dented, but consumers *benefit* through lower prices. Still, this gain could conceivably be trumped by a quality-based harm because self-preferencing artificially nudges consumers into using the game-master's in-house product which is *assumed* to be an inferior option. To complicate things further, even this prediction changes once the model is expanded to consider factors like consumers with different preferences and intergroup network effects.[94]

Unfortunately, other studies are scarcely less ambiguous. For instance, one economist extends the above-mentioned model.[95] What does he find? Self-preferencing can have opposite impacts on total and consumer surpluses depending on the strength

93 Choi and Jeon [2020] (forthcoming).
94 And even here, predicted effects are ambiguous.
95 *See* Jakhu (2018).

of advertiser network effects, which, in turn, are affected by consumers' aversion to ads and by the likelihood of ad-viewership converting into sales.[96]

The foregoing, mind you, is not to criticize economists; multiplicity of models is certainly their profession's most valuable contribution. The point is instead to stress how formally rationalizing self-preferencing as a potential competition problem is not something all antitrust decision-makers will be able to do.

C) Data-twinking

Kingmaking and self-preferencing generate intuitively troubling effects on "consumer welfare" which can be formalized in some circumstances. But what of data-twinking? From the get-go, this practice seems to exacerbate the theorization dilemma.

1. "Consumer welfare" as a smokescreen?

The crux of the issue here relates to how a game-master's panoptic omniscience over its platform infrastructure distorts within-platform competition when the game-master can also be a player. Perhaps more so than kingmaking and self-preferencing, data-twinking intuitively appears to arouse anxieties alien to "consumer welfare".

Take Amazon, a platform which has a God-like view of the actions of consumers and suppliers who use its marketplace infrastructure. Plying the jargon of "information asymmetries" downplays the significance of this position. For what is truly notable is not merely the game-master's ability to harvest an outsized data trove. It is rather the fact that optimized information held by Amazon bestows upon its retail activities a potentially *unfair advantage*. The point is perhaps better made by borrowing from some of the platform's former employees. They have explained how pervasive

[96] *See* also Krämer and Schnurr [2018] 514, 523-24 (reviewing other models and finding that welfare predictions are ambiguous).

access and use of data on things like consumer searches and price sensitivity drives the firm's retail strategy, enabling it to '"target […] private label products with perfect precision"'.[97]

However, injustice in competition does not make "consumer welfare"-centric antitrust tick. And, regrettably, economic theory has only little to offer on the dynamics and effects of data-twinking per se – the behaviour viewed in isolation from the more general matter of organic business integration, which is something that will interest us in the next chapter. So, can harm be convincingly rationalized?

2. Incentives?

The multi-sided platform's advocate, we have seen, will often attempt to nip our worries in the bud by questioning the very rationality of the impugned upstream power play. Economic theory, they would recall, tells us that for broker platforms like Amazon Marketplace to thrive, the interests of both consumers and suppliers must be catered to. As Amazon put it itself in sworn testimony to the US Congress in July 2019, 'we don't use individual seller data to directly compete with them'[98] since '[o]ur incentive is to help the seller succeed because we rely on them.'[99] What's more, the jury is still out on whether – and, if so, in what circumstances – (big) data harvested by firms to engage in product improvement or diversification can even constitute a competitive advantage.[100]

Nevertheless, there is anecdotal evidence that presents a compelling counterpoint to this somewhat Panglossian view of things.[101] An internal report reviewed by *The Wall Street Journal*, for instance, sheds light on how Amazon data-

97 Capital Forum (2018).
98 Rubin and Reichert (2019) (quoting Amazon's associate general counsel).
99 Tracy (2019) (quoting Amazon's associate general counsel).
100 *See* Calvano and Polo [2020] (forthcoming) 15-16; Bourreau and de Streel (2019) 10; Biglaiser Calvano and Crémer [2019] 41, 44, and the literature cited in all three papers.
101 Recall Capital Forum (2018).

twinked the bestselling car-trunk organizer manufactured by a merchant called Fortem.[102] The document contains twenty-five columns of information on the latter's sales and expenses, which the platform's own employees confirmed were used to guide Amazon's private-label strategy. In their words: '[b]y knowing Amazon's profit-per-unit on the third-party item, they could ensure that prospective manufacturers could deliver a higher margin on an Amazon-branded competitor product before committing to it'.[103] With the hindsight of a healthy $4-per-unit profit on Fortem's $25 product, the platform would have agreeably been remiss for not launching its own copycat, which it eventually did in October 2019.[104]

More trivially, isn't Bezos's business ethos infused by the idea that '[y]our margin is my opportunity'?[105]

Beyond anecdotes, there is recent economic research to back them up. One particularly interesting model zeroes in on the growing significance of data-driven (cross-sided) network effects in product innovation and conglomerate strategies.[106] More specifically, it shows that a dominant digital firm theoretically does have an incentive to leverage data-driven network effects – these are data-induced reductions in the marginal cost of innovation – generated through the provision of its core data-based product to successfully enter other markets. Why? Because data acquired in the dominated core market decrease the innovation costs of creating other products.[107] Diversifying thus becomes an economically rational business decision insofar as the economic burden of serving consumers with an acceptable substitute is low enough.[108]

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102 Mattioli (2020).
103 ibid.
104 ibid.
105 Quoteresearch (2019).
106 *See* Prüfer and Schottmuller (2017).
107 ibid 15.
108 ibid 16.

Prosaically: a powerful platform obtains data through the digital infrastructure it oversees; this trims its innovation costs and incentivizes it to secure new data by diversifying when entry costs are not excessively high.

Furthermore, two empirical studies by marketing economists are also particularly worthy of note. The first is rather modest, looking at Amazon's behaviour during April 2010. It finds that, although Amazon's private-label offerings were small when compared to the total number of products up for grabs across multiple (sub)categories of its marketplace platform, the firm sold a disproportionately large amount of high-demand products.[109] To illustrate, Amazon only offered 5.8% of the 2,460,108 products marketed in the "Tool & Home improvement" category of the platform. But it also sold 88 of the top 100 bestsellers.

According to the authors, Amazon's omniscience over its marketplace infrastructure not only enables it to directly target obvious bestselling segments of its marketplace; it also helps the platform cherry-pick those mid-tail niches where expected demand is, ex-ante, not sufficiently high for the platform to readily sell directly, while not low enough for it to ignore completely.[110]

The second study is more recent and comprehensive.[111] It investigates Amazon's entry pattern across a wide range of its marketplace segments between 2013 and 2014. The finding? Amazon's behaviour is 'motivated primarily by the desire to capture more value'.[112] More specifically, the platform uses its data to target goods with higher prices, lower shipping costs and greater demand. However, it also accounts for information relating to:

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109 Jiang, Jerath and Srinivasan [2011] 757.
110 ibid 758.
111 Zhu and Liu [2018] 2618.
112 ibid 2631.

— (i) the product's consumer rating;

— (ii) the pool of merchants against which Amazon would then need to compete against;

— (iii) the amount of effort merchants must expend to increase sales; and

— (iv) the fact that the product space is occupied by a merchant that has not subscribed to Amazon's fee-paying storage and fulfilment services.

Note that the paper's authors do acknowledge that one cannot exclude the possibility that data has no role in Amazon's entry strategy (though they find this to be rather implausible).[113] Yet, if they were worthless, why would the platform investigate suspected data leaks and bribes of its employees,[114] or run the risk of perjuring itself over allegations of data-twinking?[115]

3. Harm?

So much for incentives.[116] Where is the "consumer welfare" harm from data-twinking?

Upstream foreclosure and its ensuing negative effects are definitely conceivable. Nevertheless, recall that our discussion here does not deal with the merits of organic business integration, at least not directly. Data-twinking, to repeat, is about the distortive impact on competition of a powerful platform's panoptic omniscience over its digital infrastructure. And as previously noted, economists are only starting to

113 ibid 2636.

114 *See* Emont, Stevens and McMillan (2018).

115 *See* Romm and Greene (2020).

116 To be complete, Belhadj, Laussel and Resende [2020] 100834, recently built on the above-mentioned empirical studies. They offer one possible, very stylized, explanation for why and when a platform like Amazon might data-twink providers. Their theoretical model's parameters are very basic, though. Inter-platform competition and network effects are abstracted away. Moreover, they assume one provider selling on both the platform and its own website. In reality, though, there are potentially (hundreds of) thousands of suppliers per niche, many of whom will only distribute via the platform. Having said this, the model predicts that data-twinking is rational when the two distribution sites are not strong substitutes and/or when the high-value good is substantially more valued than the low-value one.

grapple with the behaviour.

Incidentally, even if the two issues are conflated, an intuitive foreclosure theory would have serious difficulties passing the rigour test. For one, Fortem's trunk organizers (to return to a familiar example) are still (at the time of writing) bestsellers despite Amazon's foray into its niche.[117] For another, assuming exclusionary effects do (or can) occur, only decision-makers guided by consumer choice (or, perhaps, *strong* consumer surplus) would see a potential competition problem. Amazon's trunk organizers could indeed be just as good as Fortem's and they will almost certainly be cheaper. The foreclosure story would therefore really be one for more diversity and maybe better protected incentives to innovate.

Anyway, refocusing on what is fundamentally at stake here – data-twinking per se – the last quip on innovation should make the sceptics pause. Many of them would surely denounce the diversity narrative[118] – only apostles of a Jeffersonian system of ordered competition wouldn't. Yet, most would share the concern for innovation which the *strong* consumer surplus and consumer choice variations of the "consumer welfare" paradigm do capture.

As the entire discussion in the past two chapters suggests, though, the difficulty with such a theory of harm does not pertain to whether it makes sense or not (it does). The challenge rather relates to whether it can be formalized, which is something economists do not have a good handle on for the moment.

In this regard, one study is worth (re)mentioning here. As noted earlier, it shows how a powerful platform may have an incentive to leverage the data-driven network effects generated through the provision of its core digital infrastructure to successfully

117 *See* Mattioli (2020).
118 *See* eg Bork (1978) 54.

penetrate other markets when the risk/reward calculus is sufficiently favourable.[119] Compellingly, the modellers flag a two-folded problem. Positive cross-sided network effects not only foster winner-takes-all-or-most dynamics in the core market; these results are also predicted to arise in the enveloped market.[120] Harm to "consumer welfare" can thus be made out because, once tipped, markets are predicted to yield lower steady-state rates of innovation.[121] Why? Because the relatively lower innovation costs flowing from data-driven, cross-sided, network effects inhibit the innovation incentives of both the incumbent and its rivals. The former is induced to rest on its laurels, whereas the latter become discouraged by the incumbent's data-driven cost advantage.[122]

Interestingly, there is at least one empirical study to confirm the supplier incentive-to-innovate narrative of data-twinking in the context of Amazon.[123]

Keep in mind, though, that profit maximization may not always be the sole driver of data-twinking. Some may interpret the above-mentioned Amazon finding as proof of a platform animated by efficiency ambitions – data-twink to lure new consumers into the enveloped niche to expand the overall pie.[124] This is a plausible outcome in the short-run, as empirical evidence regarding Amazon suggests.[125] The practice might, moreover, also be viewed as fuelled by a desire to signal product quality to consumers, especially those who would not return subpar products (due to costs).[126] Plus, even if a platform like Amazon does leverage its acquired data to envelop

119 *See* Prüfer and Schottmuller (2017).
120 ibid 15ff.
121 ibid 18.
122 The model is tailored to Alphabet/Google's expansion from general search to online cartography. But its authors claim their predictions would hold in any data-driven market where user data reveals some information about users' preferences or features and where this data can easily be logged.
123 *See* Zhu and Liu [2018] 2618.
124 *See* van Gorp and de Bijl (2019) 32.
125 *See* Zhu and Liu [2018] 2618, 2632.
126 Qiu (2018) 37ff.

segments within the digital infrastructure, the economic welfare of consumers, society and, surprisingly, suppliers will not necessarily take a hit. As one economist shows, providers (say, Amazon Marketplace merchants) may continue to thrive because of the quality-signalling effect data-twinking can generate.[127] Again, overall demand could expand and enable them to achieve greater profits despite the increased pricing pressure caused by the platform's entry.

The upshot, then, is that this form of game-mastering creates an even more complex challenge for "consumer welfare"-minded antitrust. A potential competition problem can be made out; but, more so than kingmaking and self-preferencing, only certain decision-makers will probably spot it. More specifically: only those (i) guided by the consumer choice or *strong* consumer surplus lodestars, and (ii) willing to indulge in a(n) (un)healthy dose of speculation.

D) Summation

As Nobel economist Jean Tirole recently wrote,

> [T]here is a *feeling* that the new digital platforms have an unprecedented ability to a) favour their own brands when making a recommendation to consumers, and b) cheaply gather substantial information about third-party products and selectively create copycats for the most successful one.[128]

To this we can add the means to c) furtively and arbitrarily skew the way suppliers are recommended to consumers.

Importantly, we have seen that the prevailing sentiment is not completely off the mark. These platforms do not merely have the ability to engage in what has been denoted here as abusive "game-mastering"; they will also often have the incentive to

127 ibid 54ff.
128 Tirole (2020) 10 (emphasis added).

do so. It was likewise further demonstrated that, assuming away discussions on normative foundations, "consumer welfare" is not a conceptually defective paradigm. Rationalizing our kingmaking, self-preferencing and data-twinking fears as potential competition problems is possible from this perspective.

Nevertheless, theory-building around these claims is by no means simple. Perhaps more so than for despotic platforms, care is required. Intuitive theories will often be misleading. And rigorous decision-makers will once again find themselves confronted with the sobering reality that formal research in this area is still quite scarce, difficult to navigate, and ambiguous.

Complexity, then, is one key challenge which could steer them back to more familiar, analogue-era, scholarship, which may be outdated for the purposes of "looking up" in the platform economy.[129]

Another difficulty lies in the fact that "consumer welfare" harm will sometimes only be noticeable to decision-makers guided by broader understandings of the paradigm, namely *strong* consumer surplus or consumer choice. In such instances, though, formal models will generally be in short supply.

With this said, let us now switch lenses and explore how game-mastering fares under the alternative "competitive process" paradigm.

Section 3. Game-mastering and ex-ante fairness

A) Prolegomenon

In the early stages of her probe into Amazon, Commissioner Vestager had this to say on data-twinking:

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129 *See* eg Valdivia [2019] 43 (analysing self-preferencing against older works on price discrimination without verifying whether their underlying assumptions still hold).

> We have concerns. People are coming to us and saying, "What is this? How to understand it – is this a level playing field when [platforms like Amazon] both can access all our data, but they can also sell all the products that we sell ourselves?"[130]

This is interesting coming from an antitrust enforcer who has always seen it as her job to *defend consumers*.[131] For, like the potentially despotic practices examined in Chapter 3, game-master mischiefs, such as data-twinking, have little to do with "consumer welfare" at first glance. Levelling the playing field is about *fairness to rivals*. It relates, more specifically, to a dimension of justice often denoted as equality of opportunity (EOp).[132] And EOp, as argued in Chapter 2, is something only decision-makers guided by the "competitive process" paradigm should be sensitive to.

Now, the history of antitrust shows that competition agencies and courts have sometimes explicitly sought to safeguard the value.[133] The EC even invoked it just as recently as June 2017 in its highly controversial *Google Shopping* decision discussed earlier.[134] So too have academics of diverse cultural horizons defended the idea that the policy should be mindful of EOp.[135] Yet, most – if not all – of these sources merely pay lip service to the concept. This has unsurprisingly led some to portray EOp as if it was a coherent ideal which can self-evidently explain every antitrust decision pertaining to allegedly unfair practices.[136]

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130 Remaly (2018) quoting Vestager.

131 Recall introduction to Part I n 1-2.

132 A World Bank report states that EOp is 'at the heart of the concern about the ability of society to […] provide a level playing field' (Paes de Barros and others (2009) 45). *See* also Motta (2004) 26 ('*ex-ante* equity […] is compatible with competition policy, which should guarantee a *level playing field* for all firms.')

133 *See* eg Case C-280/08 P *Deutsche Telekom* ECLI:EU:C:2010:603, [2010] ECR I-9555, para 230 and Case T-336/07 *Telefónica and Telefónica España* ECLI:EU:T:2012:172, [2012] electronic Reports of Cases, para 204. *See* also *United States v American Linseed Oil Co* 262 US 371, 388 (1923); *Brown Shoe Co v United States* 370 US 294, 324 (1962); *Ford Motor Co v United States*, 405 US 562, 570 (1972).

134 *Google Search (Shopping)* (n 72), paras 331-332 and 343.

135 *See* among others Fox [1981] 1140 and [2018] 3; Lamadrid de Pablo [2017] 147, 148; Deutscher and Makris [2016] 181, 214; Drexl (2014) 43-44; Zäch and Künzler [2009] 269; Hayashi (2009) 45-46; Suzumura (2005) 8-10.

136 *See* eg Dehdashti [2018] 305.

The gripe is not purely semantic; it brings us back to the first aspect of the general claim this thesis is attempting to make a compelling case for. Prosaically: "looking up" in the platform economy can be done within antitrust's current analytical framework; but the exercise becomes more natural and rests on potentially sounder normative foundations when mediated by the alternative "competitive process" approach; yet, there is little incentive to switch if the consensus need for rigour still holds. As explained below, our game-mastering worries can be theorized in a formal way when one appeals to the political philosopher's ideas on EOp. The task, however, is by no means simple. Handling political philosophical theories of EOp is a daunting exercise for the uninitiated as incompatible renditions of the value abound. Accounts are also often abstract and seemingly irrelevant for antitrust lawyers. The latter may therefore initially be forgiven for doubting the merits of the enterprise suggested here.[137]

To be clear, though, the purpose is not to engage in a critical appraisal of this scholarship, a task well beyond the remits of this project and of my competences. Once again, the aim is more epistemological: is EOp heuristically useful for formalizing our game-mastering anxieties under the "competitive process" paradigm?

In attempting to answer this question, one should recall the analytical skeleton sketched in Chapter 2. There, a distinction between outcome and ex-ante fairness/EOp was expounded. Protecting the latter, it was further argued, is the only aspect of justice antitrust can justifiably attend to, and entails targeted interventions to correct certain (dis)advantages players may bear in the economic game flowing from unfair procedural defects and/or background conditions.

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137 Every EOp theory I have come across was either highly abstract, part of a broader theory of justice, or developed to address shortcomings in social policy (for instance, in access to education and jobs, or healthcare).

What follows builds on these insights and connects them to our game-mastering matters. In so doing, anthropomorphisms,[138] simplifications and analogies will be made. Such intellectual shortcuts would undoubtedly irk the philosopher. Still, they are necessary and need not overly trouble us here given the boundaries of our discussion.[139] Against this backdrop, let us now explore how antitrust decision-makers can "look up" by taking EOp seriously.

B) The ideal(s) of EOp

EOp has a brief, but rich history.[140] Despite the lack of consensus around a singular formulation, philosophical reflections on it can be usefully clustered into two broad categories that essentially track the previously suggested distinction between procedural and background (un)fairness. There are thus formal theories (1) and substantive ones (2).[141]

1. Formal

Formal EOp seems relatively straightforward prima facie. Clearly, one might say, this conception merely fleshes out the well-known slogan popularized during the French Revolution that positions should be open to talents and people should be judged according to their abilities in competitive settings.[142] As explained below, there is more than a little truth to this. A subtle distinction, which cannot be dismissed as hair-splitting, must nevertheless be made between two species of formal EOp.

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138 ie firms will be treated as if they were natural persons.

139 The contrary would entail a double-standard: contemporary antitrust has not repudiated economics even though it often relies on unrealistic assumptions.

140 Gomberg (2007) 2, traces its first literal formulation to a late-19th-century economics journal.

141 Theorists name their theories (and those of others) in various ways and infuse them with different content. However, distinguishing *formal* from *substantive* conceptions seems to me the best didactic starting point for present purposes.

142 Arneson (2015) 2.

a) Neutral

The first may be denoted as "neutral" EOp and is the simplest formulation of the ideal – even some libertarians would countenance it.[143] More intelligibly for the *competition lawyer*, it reflects the idea whereby powerful game-masters would have a duty to make available the games they operate to all players on equal terms. Following this view, the EOp-mindful antitrust decision-maker must be wary of whimsical or prejudiced market decisions which (dis)advantage some over others.

Our kingmaking fears fit neatly here. For example, (within-platform) competition between hoteliers becomes arbitrarily distorted when powerful OTAs skew their search results to favour hoteliers able and willing to loosen their purse strings. Ditto when Facebook's treatment of app developers rests on whether their business models are aligned with the platform's own interests.[144]

But why is this so? Most philosophers would probably identify the idea of *impartiality*[145] as the moral fulcrum of what I call "neutral" EOp (although some may argue that it is more about *respect* owed by the game-master to the players).[146] If this is correct, the problematic nature of a particular game-mastering tactic then lies in how the platform implements its rules – the Facebook developer guidelines and Booking.com's ranking policy. Without them, we would have little to assess partiality.[147]

To my mind, such a theory enables us to formalize explicitly what the ADLC only implicitly perceived when it condemned Alphabet/Google for having suspended

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143 *See* eg Hayek (2011) 148-155; Flew (1981) 45-46 and 112-114.

144 *See* DCMSC (2019) 41-42.

145 *See* eg Richards [1997] 253, 258-260.

146 *See* eg Miller (1997) 102 ('[i]t is disrespectful of people not to give equal attention to their claims, not to attempt to gain an accurate picture of their circumstances, not to explain the reasons for decisions, and to use methods that violate their dignity.')

147 As per Scanlon (2018) 44, neutral EOp is an 'institution-dependent notion'. Similarly, *see* Richards [1997] 253, 260. cf Miller (1997) 102.

Navx – a supplier of online databases for GPS navigation devices and smartphones – from its AdWords service used to reach Google Search consumers.[148] Foreclosure was indeed not the issue here.[149] Nor were Alphabet/Google's advertiser rules, despite the extensive "bouncer's rights" they reserved to the platform.[150] Instead, what the agency took exception to was the whimsical nature of Alphabet/Google's decision, given that some of Navx's direct competitors who also relied on AdWords had been treated more leniently for no objectively justified reason.[151] The negative effects on consumers were speculative; only a sensitivity to neutral EOp could hence properly rationalize antitrust intervention.[152]

Similarly, this theory gives formal legs to what the ACCC instinctively described as 'likely to be inconsistent with what might reasonably be expected of a competitive market',[153] when it highlighted Google's and Facebook's ability to arbitrarily block small businesses from using their services.

What are we to make, though, of other instances of potentially abusive game-mastering? Self-preferencing moves by the likes of Alphabet/Google or Amazon assuredly do fit this lens. Nevertheless, there is something intellectually dishonest about the proposition. For what seems to have irked plaintiffs and some decision-makers in those situations is not so much the partiality (or disrespect) which may transpire from such practices. It is rather primarily the fact that those platforms are (allegedly) not "competing on the *merits*".[154] This observation leads us to the second species of formal

148 *Navx* (Case 10/0011M) ADLC Decision 10-MC-01 30 June 2010.
149 ibid paras 175, 185-186, 193.
150 ibid paras 173, 176-178.
151 ibid para 184.
152 ibid paras 222-238, 243 (explaining the distortion), 244 (speculating on long-term consumer harm flowing from potentially higher prices, reduced innovation and lower quality).
153 ACCC (2019a) 164-165.
154 *See* notably Commissioner Vestager's statement regarding the *Google Search (Shopping)* case in EC press release (IP/17/1784).

EOp: meritocratic EOp.

b) Meritocratic

Like a chimera, the slogan "competition on the merits" has tormented antitrust for decades. As the OECD once noted, '[l]awyers, judges and competition law enforcement officials have been using this phrase for many years to explain and justify their arguments and decisions, but there is no consensus on what the term means.'[155] Philosophers, by contrast, have thought long and hard about "merit" and how it relates to EOp. Yet, the antitrust community has turned a blind eye to them, choosing to instead assume that meritocratic competition necessarily dovetails with economic efficiency.[156] This intuition could be correct. Still, because economists are ambiguous on self-preferencing's efficiency credentials, one should take a closer look at the intellectual process which precedes the idea.

So, how can philosophical reflections on merit and its relation with EOp inform us here? In a nutshell, meritocratic EOp means ensuring that the pattern of competitive outcomes is determined solely by the performances and abilities of rival undertakings according to predetermined criteria.[157] Under this formulation, in other words, EOp is safeguarded insofar as players refrain from placing obstacles in the paths of their rivals which prevent the best among them from emerging.[158]

The idea of being "the best" in market competition is, of course, somewhat opaque as it fails to specify the benchmark for making the assessment. Attending to this issue might entail insoluble controversies.[159] Some would say discord can nonetheless

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155 OECD (2005) 9.

156 *See* eg *Intel* (Introductory ch n 12), paras 133-134.

157 *See* Roemer (1998) 16 (distinguishing "merit" from "desert", which is sensitive only to effort). *See* also Segall (2013) 87; Cavanagh (2002) 35 (implicitly making the same distinction).

158 Richards [1997] 253, 261.

159 *See* Arneson (2015) 5.

be avoided. William Galston, for example, writes that 'societies do not just declare the existence of certain tasks to be performed. They also make known, at least in general terms, the kinds of abilities which will count as qualifications to perform these tasks.'[160] And upon reflection, the claim does seem plausible enough as it concerns market competition. Don't antitrust decision-makers assume that businesses vie for consumers' patronage according to metrics revealed by the latter's choices, such as prices, quality, choice, diversity, and innovation?[161]

So understood, neutral and meritocratic EOp are similar since they are both institution-dependent theories.[162] Put differently, applying them means examining how the platform implements its rules, rather than the rules themselves.

To illustrate, consider the Alphabet/Google self-preferencing allegations. The argument whereby, say, Google Shopping's positioning/display in Google Search, distorted meritocratic competition rests on an idea of merit whose content is tied to the competition organized by Alphabet/Google through the general search engine. What counts as merit here – ie the abilities/performances that are relevant for obtaining a prominent ranking – is determined by the rules which structure this competition. Following Alphabet/Google's stated policy, these rules aim to ensure 'high standards of relevance and quality'[163] in organic search results. *From this perspective*, there is thus a potential competition problem only if Alphabet/Google search verticals (like Google Shopping or Google Local+) are actually inferior to third-party rivals who all compete within Google Search.[164]

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160 Galston (1997) 174.

161 *See* eg Delrahim (2019) (stating – in his capacity as top-ranking DoJ official for antitrust issues – that '[a]s we think about antitrust enforcement in the digital economy, the key issues that antitrust enforcers must untangle are whether a company is growing due to superior price, quality, and innovation […]'). *See* also *Intel* (Introductory ch n 12) para 134.

162 *See* Scanlon (2018) 44-52.

163 Google (2019).

164 For such empirical claims, *see Google Search (Shopping)* (n 72) paras 490-491; Kim and Luca [2019] 596.

Granted, "meritocratic" EOp might be the wrong label. Some philosophers would say a vision of EOp which reflects a "best-player-wins" imperative is underpinned by *legitimate expectations*, not merit.[165] That is, suppliers may have a claim against game-mastering platforms because, having played by the game-master's rules and objectively outperformed the latter's in-house competitor, they could legitimately expect to win. Moreover, other thinkers would argue that meritocratic EOp cannot plausibly be tied to fairness at all but really is, at bottom, an efficiency principle in disguise.[166]

Whatever the case may be, though, the upshot remains the same: antitrust decision-makers *can* appeal to EOp without merely paying lip-service to the value. They must tread cautiously, however; much like they would when, guided by the "consumer welfare" imperative, they query economists for advice.

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Taking stock of our discussion so far: we can formally rationalize our game-mastering concerns by resorting to EOp, but there is clearly nothing self-evident about the notion. From my understanding, it is possible to conceptualize the value as a purely formal principle which embodies (or is associated with) procedural fairness (perhaps deceptively so if meritocratic EOp is indeed an efficiency humbug). Importantly, two distinct species of formal EOp – neutral and meritocratic – arguably coexist. They should not be misleadingly conflated to give the impression that they each dovetail towards a single ideal.[167]

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165 *See* eg Galston (1997) 174. cf Cavanagh (2002) 72-76.

166 *See* Daniels [1978] 206. For a sophisticated account of why meritocratic EOp is arguably about efficiency, rather than fairness, *see* Cavanagh (2002) 44-80.

167 *See* Richards [1997] 253, 262-263 (explaining that to conflate them either (i) overlooks the fact that one is then creating a composite ideal underlain by multiple, distinct, ethical bases; or (ii) entails making an assumption (ie ground-level impartiality is inherent to, and inseparable from meritocratic EOp) which is (a) false (because it is actually possible to run a merit-based

To be sure, a particular system of antitrust may compel its courts and competition agencies to pursue a policy that is sensitive to both, in which case formal EOp may be a fitting label to describe it. Nevertheless, the point here is that decision-makers purporting to take EOp seriously need to be clear on two things. One: what are the tenets and assumptions undergirding their actions? And two: are the latter compatible with the ordered competition desired by the societies they serve?

That said, a competition policy which only safeguards formal EOp has limited reach for addressing our upstream worries. As explained, when attentive to this value, antitrust might be able to rationalize as potential competition problems certain types of game-mastering practices.[168] Yet, such a policy surely cannot extend to the allegedly unfair situations involved in Amazon's data-twinking or in the "App Store tax" Apple levies on third-party developers.[169] In these cases, formal EOp 'fades at the edges when it is pushed.'[170] The question, then, is: are there other ways for antitrust to capture them while remaining faithful to EOp? The answer, as suggested earlier, may be in the affirmative. What follows explains why.

2. Substantive

Formal EOp has been described as morally 'stilted, narrow, and coldly artificial.'[171] Following Bernard Williams' seminal exposition of how the principle can end up crystallizing systems of privilege,[172] many philosophers have sought to substantively

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competition which condones arbitrary discrimination); and (b) potentially unhelpful (since the assumption would also further presuppose that ground-level impartiality can be taken for granted, which then begs the question as to why it would have anything to do with merit)).

168 Recall our developers on Facebook, the surreptitious sale of competitive advantages by powerful OTAs, or the self-preferencing some platforms (reportedly) indulge in.

169 *See* Toplensky and Nicolaou (2019) (reporting on Spotify's EU antitrust complaint regarding the "Apple tax").

170 Frankel [1971] 191, 203.

171 ibid 204.

172 Williams illustrated this through the example of a hypothetical warrior society where the recruitment process of warriors – a class historically foreclosed to all but the wealthiest families – becomes subjected to formal EOp. Despite the reform, though, the rich continued to

bolster it. EOp, they all argue, should more faithfully reflect the "level playing field" metaphor, which procedural fairness fails to achieve on its own. Competitors come to the starting gates armed (or saddled) with varying types of (dis)advantages that ultimately weigh on the structure of results. Some of these are borne from factors within their individual control[173] and would raise little eyebrows from all but the most radical egalitarian. Other (dis)advantages, however, flow from morally arbitrary variables, making them (potentially) unfair and ripe for counteraction.[174]

Roughly sketched, this is what substantive political philosophical theories of EOp are about. They are attempts to render EOp sensitive not only to the effects of (dis)advantages in competitions resulting from procedural defects, but also to those emanating from background conditions. To wit, substantive EOp theories try to justify measures that would further reduce disparities in players' prospects of success arising from competitive (dis)advantages which can be deemed unfair.

Still, a more granular look at the literature impels us to make finer distinctions. To me, (at least) three broad types of substantive EOp theories should be distinguished for our antitrust purposes: meritocratic-plus (a), Rawlsian (b), and responsibility-sensitive (c).

a) Meritocratic-plus

Meritocratic-plus EOp theories, as the label suggests, relate to the formal version detailed earlier. Their proponents, while denouncing the latter for its conservative bias, contend that it does get one thing right: the competitive process should be carried out

be recruited over virtually everyone else. Why? Because wealth-derived competitive advantages made them better warriors. So, although everyone was considered and judged on merits, formal EOp was insensitive to certain competitive (dis)advantages; it merely perpetuated the pre-existing situation (*see* William (1997) 98-100).

173 These include things like choices, effort, preferences, ambition, and motivation.

174 These are what Rawls would denote as natural and social "contingencies" (Rawls (1999) 14). Others might simply speak of "circumstances".

in ways enabling the "best" to emerge as winners. What the meritocratic-plus theorists nonetheless abhor is the obliviousness their formal counterparts display at the counterfactual. The question we should really be asking, they argue, is: who would come out on top if each competitor had had a fair access to what is needed to win in the first place?[175] For the rules of the economic game would be fundamentally "unfair" if players only had the chance to play by the same rules, yet did not enter the game on proximately equal or similar terms.[176]

Meritocratic-plus philosophers, though, are not always very forthcoming on their specifications of (enhanced) merit and fair (dis)advantages. Take John Shaar's account, which tells us little more than: 'all competitors should have the *same* advantages'.[177] Our antitrust decision-makers, needless to say, cannot do much with this.[178]

Other theorists, fortunately, do bite the bullet. David Miller's EOp theory, for instance, argues that merit in competition tracks talents, choices and *effort*,[179] where effort matters 'only because it counts, along with talent and choice, as a factor in determining what a person achieves.'[180] Miller further indicates that, for him, competitive advantages whose effects must be counteracted also include those which flow from "integral" luck.[181] More specifically, he would require institutions to 'reduce the effects of luck by *not allowing gains to be carried forward from one venture to the*

175 *See* eg Mason (2006) 38.
176 Buchanan (1983) 66.
177 Schaar (1997) 144 (emphasis added).
178 Admittedly, Schaar did note that his account was more a critique of formal EOp than an attempt at a fully fleshed alternative.
179 Miller (1999) 177 and 248.
180 ibid 184. Miller, though, confusingly writes that he is theorizing "desert". But with desert, the *only* relevant consideration is "effort" (*see* supra (n 157)).
181 That is, luck which affects the performance itself, such as a runner being tripped during a race (ibid 143ff).

next'.[182] This suggests that background fairness might likewise be compromised when winners leverage the edges they derive from their success in one competition to another.

Let us pause here a moment. Despite initial scepticism regarding intelligibility, Miller's theory actually can avail us in our attempt to rationalize certain game-mastering scenarios, especially those which would elude formal EOp.

Consider Amazon's data-twinking. Rewarded with, inter alia, data for its tremendous achievements as a marketplace operator, Amazon thereby obtains an advantage. But when leveraged to inform its retail business, the platform breaches Millerian EOp since said advantage originates from the outcome of a different competition – the one pitting, under a narrow market definition, marketplace platforms against each other. If antitrust was receptive such an argument, curtailing the use of competition-sensitive data powerful platforms collect as game-masters – which is what some have called for[183] – might thus be justified. The intervention would then reflect a particular vision of how competition should be structured wherein a specific type of luck is singled-out to prevent it from magnifying many times over. Why? Because its reverberations affect one's ability to succeed in another market and thereby reduces the commercial uncertainty which should normally prevail in a competitive environment.

With this in mind, one might also consider the theory formalized by Nobel economist James Buchanan. According to him, economic competition operates under a "finders are keepers" principle.[184] And the fairness inherent to it, he writes, depends on the factual matrix at hand. If many games exist, starting gate equality is not really an issue provided people can join them voluntarily while retaining the option to exit.[185] Where fairness of competitive advantages does become a critical concern is when there

182 ibid 201 (emphasis added).
183 *See* eg Schweitzer and others (2018) 115.
184 Buchanan (1983) 59.
185 ibid 60.

is only one – must-play – game. Here, Buchanan argues that

> If there are demonstrable and acknowledged differences in endowments, talents, and capacities, differences that are discernible at or before the effective starting point, there would seem to be persuasive arguments for discriminatory handicapping, *even at a reckoned cost in lost social value*.[186]

Buchanan's EOp, it seems, requires that competitors have fair chances of winning. This, in turn, means success must be determined by elements which every player can control and by chance factors which affect them all equally.[187] Hence, competing on merits again entails leveraging one's choices and abilities, but *also* one's efforts, and luck. Societies should then mitigate the effects of (dis)advantages flowing from social circumstances with which competitors enter the game.[188]

What the above might signify for *antitrust*, mind you, is rather murky. Buchanan himself proposes to implement handicaps through "constitutionalized" intergenerational transfers of assets and publicly financed education.[189] More importantly, interventions (he writes) should *not* interfere with the market process as such. They should instead directly target 'the sources of the undesired consequences, which is the distribution of premarket power to create economic values.'[190] In the context of interest to us here, these reflections would rather support *ex-ante measures*, not antitrust. For example, forcing platforms to share their competition-sensitive data in certain circumstances;[191] or preventing them from enveloping the spaces of their suppliers, as India has already done.[192] We shall return to these questions that relate to

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186 ibid 60-61 (emphasis added).

187 ibid 69.

188 Buchanan writes of the unfairness of advantages flowing from "birth", which include natural and social contingencies. However, he concedes that the edge players have owing to their luck in the genetic lottery is something one must simply accept (ibid 59, 69-70).

189 ibid 63-64 and 68-69.

190 ibid 68.

191 *See* references in Appendix E.

192 *See* Mundy (2019). This policy prescription is particularly *en vogue* (*see* eg OECD (2020); Khan [2019] 974).

intervention (as opposed to theory-building) in Part III.

At this juncture, though, what is the takeaway from the preceding exposition? It is that, unlike its narrower formulation, meritocratic-plus EOp is sensitive to some elements of background unfairness, such as advantages borne from success in other competitions and from social contingencies. More game-mastering situations could accordingly be caught because, here, being the best performer is not all that counts. Furthermore, as a matter of theory and insofar as it goes beyond procedural justice, this EOp ideal has little to do with legitimate expectations, and even less so with efficiency considerations. Rather, it is about (*enhanced*) *merit*[193] (although some say *respect for persons* is the true underlying value).[194]

The foregoing notwithstanding, meritocratic-plus EOp is not to be confused with a second type of substantive EOp theory denoted here as Rawlsian.[195] Some will no doubt find the distinction superfluous.[196] We shall see, however, that dwelling on Rawlsian EOp is insightful for our attempt to formally rationalize game-mastering practices as potential competition problems.

b) Rawlsian

Rawlsian EOp theories unsurprisingly track the insights of their namesake. Rawls, of course, is (one of) the most recognized contemporary political philosophers whose contributions to the liberal tradition often inspire legal scholarship. For the uninitiated, suffice it to note that our indebtedness to him stems from (but is by no means limited to) the theory of justice he expounded in his 1971 *magnum opus*, *A Theory of Justice.* In short, Rawls articulated there the idea whereby a just society, comprised of rational

193 *See* Miller (1999) chs 7-9.

194 *See* Mason (2006) ch 2 (arguing that Miller is misguided and that what really lies beneath meritocratic-plus EOp is respect for persons).

195 Fishkin (2014) 31ff, makes a similar distinction.

196 Segall (2013) 6, groups them together under the label "Substantive EOp".

and self-interested members, would be organized according to principles these individuals would agree upon if a state of impartiality could be secured beforehand.[197] Assuming this "original position", Rawls argued that societies would choose two main principles. The first would endow everyone with an equal right to the most extensive basic liberties compatible with similar freedoms for all.[198] The second would come in two parts – the first being lexically prior to the second in case of conflict – prescribing the conditions under which social and economic inequalities would have to be deemed morally acceptable. More specifically, Rawls wrote that such inequalities would have to be arranged so that they are:

- (i) open to all – this is what he denoted as the "fair equality of opportunity principle" (FEO); and
- (ii) to the greatest benefit of the least advantaged (viz the "difference principle").[199]

The "difference principle" (mentioned in Chapter 1) articulates a form of "identity-based" *outcome* justice. "FEO", by contrast, bears some striking similarities to our meritocratic-plus conceptions as Rawls was sympathetic to the idea of tying EOp to the liberal principle of "careers open to talent".[200] Yet, he also was greatly disturbed by the fact that leaving it at this would allow contingencies to strongly influence the structure of competitive outcomes. To correct the 'obvious injustice'[201] these morally arbitrary factors could foster, Rawls argued that EOp should counteract some of their

197 Recall ch 1 text to n 81. This is the idea of the "original position" behind the "veil of ignorance".
198 Rawls (1971) 60ff. (1999) 53. These basic liberties include political liberty, freedom of speech and assembly, liberty of conscience and freedom of thought, freedom of the person, as well as freedom from arbitrary arrest and seizure (Rawls (1999) 53).
199 Rawls (1971) 60ff.
200 ibid 70.
201 ibid 72.

effects.[202]

How is this different from meritocratic-plus variations, though? Rawls's vision of EOp, for example, would likewise not remedy unfairness wrought by the 'natural lottery'.[203] Furthermore, those with the same level of talent and effort, he similarly wrote, should have 'roughly equal prospects'[204] of success. To me, there are essentially two potentially relevant differences for our discussion.

First, Buchanan and Miller explicitly opposed interfering with the structure of outcomes as such. More prosaically, if one pictures a starting gate, their EOp principles would intervene *before* the competitors take their cue.[205] A Rawlsian egalitarian, on the other hand, would, if needed, also support meddling with the competitive process itself.[206] This could broaden the horizon of upgazing antitrust decision-makers. Drawing from Rawls, they might be able to rationalize enforcement in cases where a game-master's own player has an edge because of the *circumstances in which it comes into existence*.

Reflect on Spotify's claim that Apple's app store rules are abusively unfair and ripe for antitrust enforcement. Apple levies a 30% tax on Spotify whenever consumers acquire a subscription via the App Store. Daniel Ek (Spotify's CEO) says this is unjust because Apple Music (the game-master's own player) is treated differently.[207] Rawlsian EOp formalizes his intuition by tying unfairness to the advantage derived from the

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202 ibid.

203 ibid 74. Rawls did argue that advantages derived from the 'natural distribution of abilities and talents' were unfair. However, his solution for this was the "difference principle".

204 ibid 73.

205 Buchanan (1983) 59, writes that '[u]nfairness in the economic game […] tends to be attributed to the distribution of endowments with which persons *enter* the game in the first place, *before* choices *are* made, *before* luck rolls the economic dice, *before* effort is exerted.' Similarly, Miller (2002) 47, further specified that his vision of EOp means '*initial* opportunity sets should be equal, not necessarily opportunity sets at some later time when choices have already been made.'

206 *See* Fishkin (2014) 32; Chambers [2009] 374, 385-389 (further noting that under an opposite interpretation, Rawlsian and Millerian EOp 'would be very similar').

207 Ek (2019).

"kinship" between Apple and its own in-house music streaming service.[208]

But why, one may ask? This question ties into the second potential divergence between meritocratic-plus and Rawlsian theories of EOp, namely the underlying value which makes them responsive to background unfairness. Although we could read the (enhanced) merit principle into Ralwsian EOp,[209] good authority indeed suggests that Rawls was more guided by considerations of *self-realization*,[210] or *self-respect*.[211]

Undoubtedly, many will be disgruntled at this point. Some platform detractors and upstream stakeholders might argue that even Ralwsian EOp does not reach far enough.[212] Or perhaps the portrayal of substantive EOp theories presented here is a fundamentally flawed one, perverted by my desire to reify them for the antitrust lawyer. If verified, this would render numerous claims of abusive game-mastering groundless from an ex-ante fairness perspective. Luckily, there is one more alternative worth exploring. It has far-reaching implications, though, befitting only the most "Left"-leaning antitrust systems.

c) Responsibility-sensitive

Despite disagreeing on how to formalize EOp, both meritocratic-plus and Rawlsian theories converge on one idea: competitive tussles should be determined by the choices competitors make, their ambitions and skills, but, to a large degree, also by the efforts they display. Competition, however, should not be skewed by unfair advantages players derive from other circumstances whose effects should, accordingly, be counteracted.

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208 For an implicit application, *see GDF Suez* (Case 14/0038M) ADLC Decision 17-D-06 9 September 2014 (condemning GDF for having leveraged significant data advantages "inherited" from its former monopoly status).

209 Scanlon (2018) 60; Mason (2006) ch 3, both acknowledge this possibility while ultimately rejecting it. Merit 'appears to play at best a derivative role.' (Mason (2006) 78).

210 *See* Arneson [2013] 316, 320.

211 ibid 324. *See* also Flew (1981) 103.

212 For eg, *see* Stigler Committee (2019) 90 (lamenting on the unlikelihood that their proposed amendments to antitrust would 'entirely eliminate the competitive advantage inherent in large [platforms]').

One reason to do this, as noted earlier, is that the latter are morally arbitrary. Another motivation which lurks, at least inchoately within Rawls's FEO, is the belief that there is something unjust about holding people responsible for factors which affect their prospects of success while being beyond their control.

Yet, some may lambast the meritocratic-plus and Rawlsian egalitarians for failing by their own logic. For if competitive edges derived from contingencies are unfair because they are morally arbitrary and beyond individual control, can we not say the same thing for those borne through the lottery of nature? Rawlsian egalitarians would rejoin that, although their EOp conception is undeniably wrenched by this incoherence, the injustice it entails can be corrected with appropriate principles of *outcome* fairness.[213] Still, such a retort will vex those sympathetic to the current of EOp theorists labelled here as "responsibility-sensitive".[214] They would argue that the sphere of ex-ante fairness extends to *all* advantages which originate in contingencies/circumstances, including natural ones. Only then could a playing field be fittingly described as being levelled.[215]

A closer examination of responsibility-sensitive EOp reveals a problem, though. Beyond the normative difficulties they might entail, most of them will be of little help to antitrust decision-makers troubled by game-mastering platforms; these theories are

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213 Rawls (1971) 74ff (1999) 64ff (arguing that the injustice caused by these types of advantages are to be corrected by the difference principle (mentioned in ch 1 (n 93)).

214 I follow Mason (2006) 90, in referring to these EOp theories as being "responsibility-sensitive". Others speak of "luck egalitarianism" (Anderson [1999] 287, 289); "radical" EOp (Segall (2013) 1); "level-playing-field" EOp (Roemer (1998) 4); "factor-selective" EOp (Fleurbaey [1995] 25); or – perhaps tellingly – "socialist" EOp (Cohen (2009) 11).

215 For an accessible book-length treatment of this philosophical current, *see* Lippert-Rasmussen (2016).

either for the taxman[216] or would leave any policy-maker bewildered.[217] Not that useful formulations of responsibility-sensitive EOp do not exist; to my knowledge, they are simply in short supply.

A prime candidate, in this regard, is the algorithm devised by economist John Roemer. Beyond its technical precision, his is particularly noteworthy because decision-makers, albeit not those responsible for antitrust, have endorsed it.[218] What's more, the Roemerian algorithm for EOp policy-making and the assumptions it relies upon are easy enough to understand.[219] Table 4.1 summarizes them and a stylized example will also be provided later for good measure.

Essentially, one begins by specifying an outcome individual agents strive for. The latter are then divided along two lines. The first, denoted as "types", regroups agents according to their respective circumstances. "Circumstances" are all the biological and social elements of the agents' environment that are (i) beyond their control, yet affect their ability to achieve the outcome, and (ii) judged by society to be worthy of compensation. The ensuing situation is thus one where all agents in any given type share (almost) the same circumstances.

The second line, which can be denoted as "tranches",[220] partitions agents according to the degree of effort they expend. "Effort" is taken as a shorthand for all 'applications of autonomous volition.'[221]

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216 *See* Dworkin [1981] 283; Dworkin (2000). Dworkin's EOp theory is too sophisticated and nuanced to be summarized in a footnote but it effectively asks the *social* policy-maker to compensate those with whom nature was not so generous by using a though-experiment (similar to Rawls's).

217 *See* eg Cohen [1989] 906, and Arneson [1989] 77. The latter himself acknowledges that his proposal would be practically impossible even for the distributive agencies he is addressing.

218 Eg Paes de Barros and others (2009) 29ff. *See* also Pignataro [2012] 800, 802 (noting that 'Roemer's algorithm [is] considered in the literature as the staple policy on this issue.')

219 The following draws from Roemer (1996) ch 8, (1998) chs 2-3, complemented by Roemer [2003] 261, (2008), [2012] 165; Roemer and Trannoy (2015).

220 Ferreira and Peragine (2016) 756; Roemer [2003] 261, 270.

221 Roemer (1998) 6.

According to Roemer, the structure of outcomes should be sensitive only to effort. Circumstantial (dis)advantages are hence problematic from this EOp perspective because they prevent the most "industrious" from winning. But how does one determine between agents of different types which one has exerted more effort? The answer, per Roemer, lies in the distinction that must be drawn between *levels* (or absolute amounts) of effort and *degrees* (or ranks expressed in quantiles or centiles) of effort.[222] By definition, every agent expends a certain level of effort. However, the fact that two agents belonging to two different types expend the same *amount* of effort does not mean they sit at the same *rank* within their respective type-distribution of effort.[223] For Roemer, it is this rank which should be decisive. Two reasons are offered. One: it reflects 'how hard a person tries'[224] to succeed. And two: how effort *levels* are distributed within one's type is beyond individual control as it depends on the amount of effort expended by others of the same type.[225] Therefore, those who have expended the same *degree* of effort (ie who sit at the same rank of their respective type-distribution of effort) should be roughly similar in their achievements.[226]

222 Roemer [2003] 261, 265-266.

223 Suppose agents A and B, respectively placed in types t_a and t_b. Their effort *levels* are 90 and 50 respectively. A has thus expended more effort than B in absolute *amounts*. However, B may have expended more effort than A in terms of *degrees* if, for example, B ranks at the 80th centile of t_b's specific distribution of effort, whilst A sits at the 40th centile of t_a's specific distribution of effort.

224 Roemer (1998) 15.

225 Roemer [2003] 261, 265-266.

226 Using the example from (n 223), if B was more successful than A under the same configuration, there would be no inequality of opportunity. However, if A also ranked at the 80th centile of t_a's distribution of effort, the resulting inequality would be entirely attributable to circumstances and should thus be compensated.

		T_1		T_2		…	T_{100}	
		e_1		e_2		…	e_{100}	
t_a	c_1	r_1	O_1	r_1	O_2	…	r_1	O_{100}
	c_2	r_2		r_2			r_2	
t_b	c_3	r_3	O_1	r_3	O_2	…	r_3	O_{100}
	c_4	r_4		r_4			r_4	
…	…	…	…	…	…	…	…	…
t_z	c_x	r_x	O_1	r_x	O_2	…	r_x	O_{100}
	c_x	r_x		r_x			r_x	

T = tranche — e = effort degree (in quantiles)
t = type — c = circumstance
O = Outcome — r = effect of c on O

Table 4.1 *Roemerian EOp*

These technicalities aside, Roemerian EOp has at least two fundamentally sweeping ramifications for our discussion.

Firstly, given that Roemer leaves the determination of what counts as circumstances to political debate,[227] antitrust decision-makers would be able to justify defining types in ways which might otherwise be difficult to sustain. This in turn opens the door to conceiving all the situations we have been exploring here as potential competition problems.

To give a germane – albeit stylized – example, let us assume a market for online mapping services (OMSs) that compete both horizontally against each other and vertically with general search platforms for value appropriation. Type t_a regroups those owned by operators of a general search engine. The remaining OMSs are allocated to type t_b. Suppose, then, that one OMS from t_a (say, Google Maps) consistently achieves high rankings owing to the favourable placement it receives in the organic search results of its affiliate (here, Google Search). As a result, Google Maps only sits at the 30th

227 This is how he can argue that his proposal is "'political rather than "metaphysical"' (Roemer (1996) 278).

centile of t_a OMSs' distribution of effort. Following Roemer's algorithm, all those t_b OMSs sitting at the same or higher rank of t_b's distribution of effort should be compensated. Why? Because Google Maps, *although it may be the "best"*,[228] has expended less (degrees of) effort than, say, Streetmap (a t_b OMS) to rank highly on Google Search.

Obviously, it is no stretch to extend such reasoning to other situations of vertically integrated platforms whose in-house offerings somehow benefit "unfairly" from this kinship. For instance, a 2018 report alleged that Amazon "unfairly" favours its private-labels by advertising them right before consumers add rival products to their shopping carts.[229] The argument advanced therein was not that the platform's own products are inferior – to the contrary. Instead, it flagged the injustice in Amazon private-labels being advertised '"at exactly the moment the customer is ready to buy"'.[230] Where is the unfairness? Well, 90% of Amazon Marketplace consumers allegedly 'select the option on the page to "Add to cart" or "Buy now," rather than scrolling below that to choose an offer from other sellers.'[231] Hence, Amazon's private-labels can win by being lazier than merchants whose niches it invades. Under Roemerian-EOp, this is intolerable.

The second sweeping implication of resorting to Roemer's algorithm for antitrust purposes is normative. Doing so indeed also means subscribing to the view that economic competition should be won through "effort" so that justice in markets tracks *desert* – not *merit*.[232] This is an issue we shall return to shortly in Chapter 5.

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228 *See Streetmap.EU Ltd v Google Inc. & Ors* [2016] EWHC 253 (Ch) [119].

229 Greene (2019).

230 ibid.

231 ibid.

232 Roemer is clear about the fact that his EOp theory is normatively anchored by "desert" (*see* Roemer (1998) 15-6; [2003] 261, 279-280). Mind you, responsibility-sensitive EOp theories are not all about desert.

3. Summation

EOp is a value antitrust cannot discard if it seriously wants to protect the "competitive process". However, befitting what we uncovered with freedom, lip-servicing EOp fraudulently obscures (or, less cynically, conceals ignorance of) the fact that the concept does not embody a singular ideal. As Chapter 6 further explains, this is important if societies value the rule of law.

To summarize:[233] early on, *ex-ante* and *ex-post* fairness were distinguished and it was argued that antitrust could not be sundered from the former to which EOp is intrinsically connected to.[234] The reason is simple: economic competition must be operated under antitrust rules which ensure justice in the structure/pattern of outcomes (as opposed to its content). Business practices that harm stakeholders may thus become problematic when they are the result of powerful undertakings exploiting competitive advantages which can be deemed unjust.

Then, it was explained that one can flesh out intuitions on EOp in multiple, intellectually rigorous, ways. Each entails an appeal to different underlying values and distinct policy prescriptions.

First, there is formal EOp, which reflects (or is potentially associated with) *procedural* fairness and has two specific formulations: neutral and meritocratic. By resorting to a conflated version of the two, antitrust decision-makers would be demonstrating their commitment to ensuring open, unbiased, competition on the merits (ie on the talents, abilities, and performances of economic undertakings).

Second, one can also articulate EOp in a substantively richer manner, thereby revealing sensitivity to *background* fairness. Like formal theories, different values

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233 *See* also Figure 4.2.

234 *See* supra ch 2 text to n 119.

undergird each substantive variant. These include enhanced merit, self-realization (or respect for persons), or desert. Decision-makers (in liberal democracies at least) need to be conscious of this and transparent about what underlies their actions.

In brief, what the preceding analysis hopefully shows is that some of our upstream concerns – denoted as "game-mastering" – can be formally rationalized as potential competition problems under the "competitive process" paradigm. The latter admittedly does require a new mindset. Moreover, it must be remembered that our discussion here centres on theory-building. Part III will deal with the practical issues of intervention.

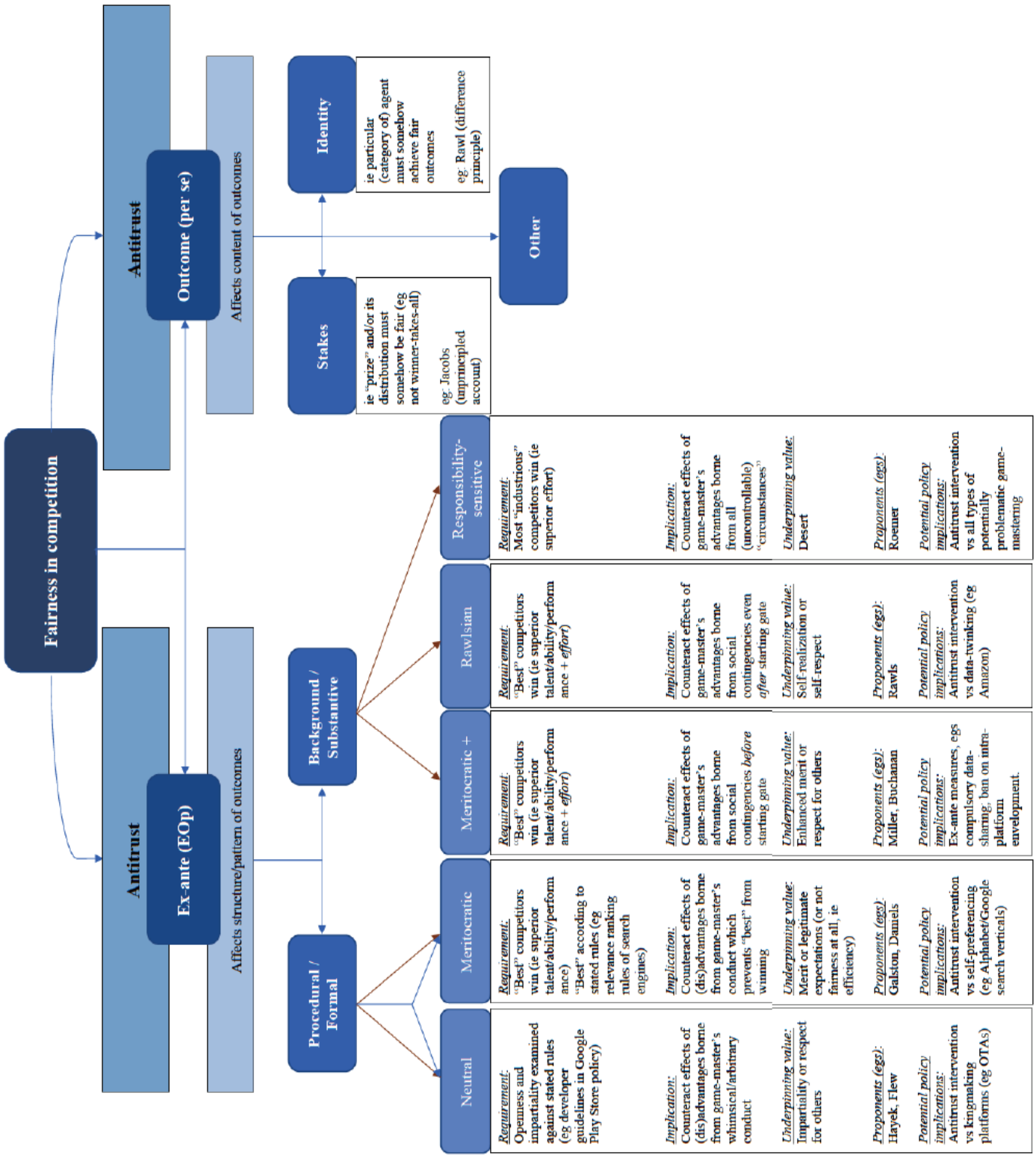

Figure 4.2 *EOp: summary figure*

Concluding reflections

In many ways, platforms evoke the game-masters those of us familiar with RPGs will have inevitably encountered. Like the latter, the former enjoy panoptic omniscience over the competitive environments suppliers are now increasingly impelled to partake in. And platforms too will often play the games they are supposed to nurture. Naturally, this reality is not a problem in itself, let alone a competition problem. Rogue game-mastering, though, is another matter altogether.

Powerful platforms, like game-masters, have the ability and incentives to exploit their God-view of the games they oversee to twink their own players at the stage of inception and/or self-preference the latter later in time. Plus, even when they forsake participation, game-mastering platforms may well distort the value capture process by engaging in covert and potentially harmful kingmaking.

Against this backdrop, a key challenge for antitrust decision-makers is diagnostic in nature. To be sure, intuitive "consumer welfare" theories will regularly identify such behaviours as conceivably suspect. But as one learned competition judge opined in befitting circumstances, 'issue[s] [are] to be determined on the basis of the evidence […], not on instinct or personal experience.'[235] Once gut rationalizations are disavowed, theorizing competition problems becomes challenging and often contingent on what "consumer welfare" is taken to mean and on the decision-maker's ability and willingness to navigate complex and frequently ambiguous economic research.

This notwithstanding, our game-mastering worries seem more related to what most of us would describe as (in)justice in competition anyway. To me, deploying "consumer welfare" rhetoric is both unsatisfactory and intellectually dishonest when

[235] *Streetmap* (n 228) [99].

used as a gimmick to square anxieties that really have little to do with the values the paradigm conceals. So, while '[n]ot every case of unfairness is a matter for competition law',[236] the point is precisely that, contrary to conventional wisdom, some of them are.[237] And when these cases come around, they should be articulated as such.

In my mind, any legal system committed to ordered competition should strive to safeguard some measure of ex-ante justice. At the same time, merely professing an oath to EOp is no less disingenuous than a backhanded pledge to "consumer welfare". Like the latter, the former is not a singular ideal. Decision-makers need to, accordingly, tread carefully. In particular, occasionally obscure philosophical verbiage should not distract them from the fact that many formulations of the value make little sense for antitrust purposes; some accounts may even be inconsistent with the systems of ordered competition their respective societies envisioned for themselves.

The dangers of moralizing antitrust ought not be understated since high-ranking officials at leading competition agencies have increasingly been resorting to inchoate fairness rhetoric in recent years.[238] To be clear, the policy cannot, as some would seemingly have it, '*entirely* eliminate the competitive advantages inherent in large [platforms].'[239] For a contest involving players who have absolutely equal prospects of success is not a competition but a lottery.

Ultimately, the mandate of antitrust authorities and courts is to ensure that in the interpretation and application of their respective economic constitutions the law is observed.[240] Where societies have chosen to establish a system of ordered competition

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236 Vestager (2016a).

237 cf Crofts (2017) reporting comments expressed by then-Inquiry Chair of the CMA, Philip Marsden, stating that '[f]airness isn't a theory of harm. Promotion isn't a theory of harm.'

238 *See* references in Schrepel [2020] 326, 358-383.

239 Stigler Committee (2019) 90 (emphasis added).

240 In some jurisdictions, this is made explicit (*see* eg Art 19 TEU).

that requires 'the greatest degree of equality concerning starting positions',[241] decision-makers should spare no theories to this end. Elsewhere, though, EOp cannot be allowed to become an open sesame for envious rivals, be they horizontal and/or vertical. As Alexis de Tocqueville once cautioned:

> There is in fact a manly and legitimate passion for equality that incites men to want to be strong and esteemed. This passion tends to elevate the small to the rank of the great. But in the human heart a depraved taste for equality is also found that leads the weak to want to bring the strong down to their level and that reduces men to preferring equality in servitude to inequality in liberty.[242]

241 Boyer (2001) 110 (describing the Ordoliberal conception of ordered competition that may have influenced the German legal order).

242 de Tocqueville (tr Schleifer, 2010) 89.

CHAPTER 5. FREE-RIDING

Introduction

"Information wants to be free". Anyone with a remote affinity to digital culture will recognize this iconic aphorism which epitomized the Zeitgeist of the 1990s. Those familiar with it may also know that the phrase is generally attributed to Stewart Brand (the editor of the *Whole Earth Catalog*). What is less well known, though, is that his words were taken out of context. Actually, the quote itself is inaccurate. What Brand told Steve Wozniak (co-founder of Apple) in an exchange at the first Hackers' conference in 1984 was that

> [I]nformation sort of wants to be expensive because it is so valuable – the right information in the right place just changes your life. On the other hand, information almost wants to be free because the costs of getting it out is getting lower and lower all of the time.[1]

Obviously, "information" does not really want anything; those who say it does do. This matters because the paradoxical tension Brand and Wozniak were debating over three decades ago is precisely what animates the upstream fears underlying our discussion here. Indeed, scores of providers put considerable effort into creating content and developing new ideas which are then embodied in a variety of useful, sometimes innovative products. This benefits us and understandably comes with the expectation of a certain return on investment. Prospects of rewards, however, are somewhat dented in our increasingly internet-enabled world. For, online, we seemingly assume that everything must be available for "free" or at a discounted price.

Powerful platforms do bear a large part of the responsibility for the development of this entitlement philosophy. Alphabet/Google, for instance, has never been shy about

[1] Gans (2015) (linking to original footage of the exchange).

its ambition 'to organize the world's information and make it universally accessible'.[2] As a result, (many) consumers are no longer in the habit of paying for things like journalism.[3] Similarly, Amazon's pricing strategy for its private-label goods often seems irrational at first glance. Its founder, Jeff Bezos, candidly admits that '[w]e do price elasticity studies. And every time the math tells us to raise prices.'[4] But, as Bezos also notes, keeping prices low ensures consumer loyalty.[5] By taking the content and ideas of others and then democratizing access to all this information, these platforms have therefore enlisted consumers as vital political allies in their competition with providers for value capture.[6]

Be that as it may, should our *antitrust* decision-makers be troubled? Using what is in the *public domain*, after all, is not something most would describe as inimical to the "competitive process" even when done at the costly expense of those whose work infills it. And to the extent consumers benefit (which clearly appears to be what many of them believe),[7] there is likewise no apparent "consumer welfare" problem either.

A paradox hence emerges. If an issue arises from powerful platforms taking and democratizing access to freely available information to the detriment of those who may have put considerable sweat of the brow into producing it, then the matter instinctively sounds more related to unfair reward-distribution than to "consumer welfare" or "competition as such". More prosaically, the intuitive concern with what are effectively cases of platforms *free-riding* on the efforts of suppliers most likely follows from one's perceptions on provider-oriented outcome fairness. Yet, as this chapter shows, it is

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2 Alphabet (2020) 5; Google (2005) 1.
3 Fisher and others (2019) 38ff.
4 Rose (2013) (interviewing Bezos).
5 ibid.
6 *See* Rahman and Thelen [2019] 177, 186-187.
7 For eg, by some estimates, consumers' average valuation of "free" Google Search results reaches €121.56/week (*see* Herzog [2018] 87).

possible to see potential competition problems here, regardless of the endorsed antitrust paradigm (Sections 2 and 3). To rephrase: some upstream platform power plays elicit worries that pertain primarily to things which should be beyond antitrust's purview. Nevertheless, we can still rationalize enforcement.

To make sense of the argument, though, one must first examine the type of claims this introduction has been tiptoeing around and explain in what way they are paradoxical for antitrust (Section 1).

Section 1. Free-riding platforms

A) The claims

Tirole recently wrote that '[p]latforms must create value, and not be parasites.'[8] Implicit in this truism is the hint that parasitic behaviour is in fact occurring, which is an empirical question. Many platform-providers, however, have been vocal about the issue over the past decade and their voices have grown louder in the last couple of years. So, what exactly are they bemoaning? Their grievances (as suggested above) effectively point to value "misappropriation" under the banner of consumer interests. More specifically, economic power is said to be abused upstream in two ways.

- Scraping

First, there is content "scraping". Alphabet/Google is the usual target, although other powerful search engine operators like OTAs could be just as well. Scraping is jargon. In the language of data and computer scientists, it refers to a form of data mining that involves using automated software applications (ie "scrapers" or "bots") to harvest data

[8] Tirole (2017) 395.

(say, pictures or text) from webpages.[9] Importantly, scraping is both ubiquitous and intrinsically neutral. Some retailers like Walmart reportedly have internal teams dedicated to lifting pricing data from rivals' websites;[10] others externalize this task by resorting to specialized firms such as Competera;[11] academics, too, are among the most avid users of scrapers.[12] In short, the practice 'might sound sinister, but it's part of how the web work'.[13]

Even so, large platforms are not akin to everyone else. When they scrape, trustbusters should intervene. This is what many providers are claiming when they accuse Alphabet/Google of propping up some of its vertical search services with their content, which they allege has been effortlessly scraped without authorization nor compensation. Consider:

— news publishers like News Corp and Axel Springer (respectively owners of publications such as *The Wall Street Journal* and *Business Insider*) that have long railed against Alphabet/Google's unsanctioned provision of increasingly lengthy press snippets in the search results of its Google Search and Google News infrastructures;[14]

— stock photography agencies, such as Getty Images and Dreamstime, which have repeatedly voiced their fears over the firm's unauthorized display of their

9 Zabriskie [2009] 5, 5. *See* also Hirschey [2014] 897, 903-906. Note that, although "scraping" is technically distinct from "hyperlinking", the two are inextricably linked (*see* Höppner [2017] 607, 617).

10 *See* Finley (2018).

11 ibid.

12 *See* eg Edelman [2012] 189 (explaining the opportunities provided by scraping for economic research and providing guidance on how to go about it).

13 Finley (2018).

14 *See* eg News Corp Australia (2018). At the time of writing, snippets seem to only be displayed in Google Search.

imagery in its Google Images service;[15]

— review sites like Yelp and E-Commerce that denounce Alphabet/Google's unapproved harvesting of their user-generated reviews and photographs of local businesses, which the firm then allegedly incorporates into its Google Local+ and Google Shopping verticals;[16] and

— other companies such as Genius, which joined in on the claim by accusing Alphabet/Google of lifting the sometimes hard-to-decipher lyrics of songs published on its website to feed Google Search.[17]

Incidentally, while these providers depict their enterprise as a struggle to preserve the lifeblood of the internet,[18] their demands from antitrust are quite different. As investigations in the EU, Italy and Germany have revealed, press publishers and stock photography agencies are not really objecting to Alphabet/Google's unabashed scraping of their publications and imagery. What they want is for scraping to continue but on their terms.[19] By contrast, firms like Yelp and Genius object to the very implementation of the practice.

- Sherlocking

The second claim of value misappropriation pertains to a practice known as

15 *See* Dreamstime's complaint (WL 6585593) para 9, in *Dreamstime.com v Google* No C 18-01910 WHA, 2019 WL 341579 (NDCal 2019). *See* Getty Images (2016) (note that following a 2018 settlement, Getty Images withdrew its antitrust complaint).

16 *See* Yelp (2017); *E-Commerce/Google* (Case No 08012.010483/2011-94) CADE General Superintendence Technical note No 15/2018).

17 *See* McMillan (2019).

18 *See* eg Oliver (2016) and FairSearch (2011).

19 *See Google/VG Media* (Case B6-126/14) BKA Decision 8 September 2015, paras168ff (finding that publishers were not endowed with compensation rights under copyright law and that antitrust enforcement would effectively mean imposing on Alphabet/Google a duty to scrape on their terms). *See* also BDZV and VDZ (2014) 10-13 (responding to Alphabet/Google's final commitment proposal to date in the EU probe); Höppner [2013] 14, 28 (criticizing the opt-out solutions resulting from the Italian and EU scraping investigations).

"Sherlocking", a moniker recently picked up by the Dutch competition agency.[20] The dynamics of this behaviour, though, are as old as commerce itself. Sherlocking is jargon to describe a powerful platform taking over concepts or ideas from its providers to supply in-house versions of the products in which these pieces of information are embodied in.

The history behind the label serves as a nice illustration.[21] Sherlock was the name of the search feature (now known as Spotlight) built into the Macintosh OS (macOS). At first, it was a relatively simple file-searching tool that only included some basic web functionality (such as translation). Consumers were obviously left wanting for more. This created opportunities for clever entrepreneurs to carve out niches for themselves within Apple's OS infrastructure. In 2001, one developer named Dan Wood did just that. He published Watson, a $30 app specifically designed to complement Sherlock by expanding its range of internet functionalities. Looking up movie schedules and calculating exchange rates were two of the many new features Mac consumers could now experience. Needless to say, Watson was an instant hit. Yet, by 2002, the app had become redundant because Apple had quickly released a revamped version of Sherlock which could do everything Watson had to offer (and more) for free.

Truth be told, many have been Sherlocked and not only by Apple. For example, Apple, but also Alphabet/Google, Microsoft, and Amazon have all replicated the personal cloud storage concept developed by Dropbox. And once within-platform integration is uncovered as the real anxiety, data-twinking – say, Facebook's use of its now-discontinued Onavo software to detect and imitate popular apps on its social media platform[22] – can likewise be viewed as a form of Sherlocking.

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20 *See* ACM (2019) 99.
21 The following draws from Pot (2017).
22 *See* Dwoskin (2017).

So, to reformulate, providers have thus relied on jargon to advance two antitrust claims that are effectively about value *mis*appropriation:

— "scraping", or the extraction of data and their subsequent reuse in a (vertically and/or horizontally) competing specialized service; and

— "Sherlocking, or the replication of information expressed in the products of dependent platform-suppliers to enter into horizontal competition with them).

Can these practices generate potential competition concerns? Before attending to this question, it is important to briefly reflect on the doctrinal implications of what the providers behind these allegations are really seeking from antitrust, namely the recognition of free-riding as an antitrust offence in and of itself.[23]

B) Beyond the rhetoric

Whenever they are accused of victimizing upstream providers, platforms tend to invoke the rhetoric of consumer empowerment. As suggested over the last two chapters, this can be misleading, regardless of the adopted antitrust lens. Here, though, powerful rhetoric is used to coax enforcement against the platforms. Indeed, critics usually liken scraping and Sherlocking to "free-riding" and "theft".[24] While doing so creates a stigma, one should be wary of sweeping analogies.

1. Free-riding

Consider the free-rider analogy. Throughout its history as a studied phenomenon in the social sciences, free-riding has almost always been described in the most pejorative of terms.[25] This line of thinking permeates antitrust as well today. In some countries, the free-rider narrative has actually buttressed some truly radical shifts in the law. Take the

23 *See* explicitly Dow Jones (2018) 2-5.
24 *See* FairSearch (2011); references in Chyi, Lews and Zheng [2016] 789, 790.
25 For a historical account, *see* Fontaine [2014] 359.

US: "free-rider problems" have been so successfully invoked over the past four decades that most vertical restraints, which were once illegal per se, are now treated as if they are incapable of anticompetitive effects.[26] Even in jurisdictions like the EU (which adopts a notoriously more stringent approach to the same issues), free-riding pleas have regularly been heeded.[27]

That said, one must note a couple of paradoxes. First, with scraping and Sherlocking, the free-riding story is not advanced to justify the *relaxation* of antitrust rules as it usually is. It is instead invoked to ground an argument for *enforcement*. Although not unprecedented,[28] this remains striking nonetheless.

Second, many commentators have rightly chided decision-makers for their almost evangelical acceptance of the free-rider "get-out-of-jail-free" card.[29] Some of these critics, however, would probably just as readily endorse the argument to depict scraping or Sherlocking platforms as 'clearly anticompetitive'.[30] This double standard is curious if only because there is nothing *obviously* wrong with these practices from a "*consumer welfare*" or "*competition*" perspective. Why else would LinkedIn (the social media platform) have been found by two US courts to have potentially '*violate[d]* the policy or spirit' of the Sherman Act by *preventing* a small data analytics firm called hiQ from scraping the public profiles of its users?[31]

2. "Stealing" information

One justification advanced by LinkedIn was to protect itself from theft, which, as noted

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26 Pitofsky (2008) 179-180.

27 *See* eg Case C-230/16 *Coty Germany* ECLI:EU:C:2017:941 [2017] electronic Reports of Cases.

28 For eg, in the EU, firms have traditionally been able to invoke capacity constraints to justify certain practices. However, in some cases, lack of capacity is actually what triggered enforcement (*see* Colomo (2016) 17).

29 *See* Grimes (2008); Lao (2008).

30 Thompson (2017).

31 *hiQ Labs Inc v LinkedIn Corp* 273 FSupp 3d 1099, 1118 (NDCal 2017), affirmed and remanded, 938 F3d 985 (9th Cir 2019) (emphasis added).

earlier, is the second analogy often used to frame scraping and Sherlocking claims. Tellingly, perhaps, Steve Jobs himself famously stated in 1996 that Apple has 'always been shameless about stealing great ideas.'[32] Now, if the analogy was accurate, both practices would elicit fears already discussed in Chapter 3. Why? Because theft presupposes ownership. Scraping and Sherlocking would then pertain to powerful platforms bullying providers into foregoing the exercise of their property rights.[33]

Yet, this is not the crux here. Suppliers who push the scraping claim will generally (the EU being a potential exception in certain instances) not be entitled to intellectual property (IP) protection, either for lack of exclusive rights to stake their case on, or because scraping is covered by a defence that limits their property.[34] Ditto for those who rage over Sherlocking as there simply cannot be any property in ideas;[35] this is perhaps the most basic tenet of IP law.[36] As Thomas Jefferson famously wrote, '[i]f nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea.'[37]

So why is the observation important? It matters because turning free-riding into an antitrust offence has a truly paradoxical implication. The policy would effectively be deployed to *create* mangled property entitlements to prevent powerful platforms

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32 Farber (2014) (quoting Jobs).

33 As argued in ch 3, the same could be said if victims were bullied into foregoing other legal rights to successfully defeat scraping and Sherlocking platforms, such as those flowing from contract, cybersecurity or tort laws. I assume here that the latter are unavailable to victims (either because they do not enjoy such rights or because the law would prevent them from successfully invoking them).

34 *See* eg Carrier [2013] 759. Stock photography agencies have themselves conceded that copyright is not a viable route for them (*see* Risch (2016) (reporting comments by Getty Images).

35 cf Stigler Committee (2019) 116 (arguing that antitrust may be warranted when powerful platforms 'expropriate the ideas and strategies of [suppliers]').

36 *See* eg Op Den Kamp and Hunter (2019) 2. To be clear, *expressions* of ideas can be protected. For instance, technical features of a gaming app that optimizes, say, the user identification process through the camera interface might be patentable. Similarly, copyright will protect the source code. But the idea of a gaming app that revolves around the concept of, say, a battle royale, cannot be protected as such (*see* usefully Guildea [2016] 445).

37 Boyle (2008) 20 (quoting and offering a close reading of Jefferson's letter to Isaac McPherson).

from using parts of the public domain.[38] One antitrust official has actually been candid on this when he says of scraping that 'some firms should not be able to get data.'[39] Yet, antitrust has only ever been allowed to interfere with the *exercise* of legal exclusivity, not its *existence*.[40]

To be clear, though, the foregoing observations are not an indictment against "propertarian" antitrust. There is, glaringly, an interfacing issue at play between antitrust and IP law. But this is a different matter to be discussed later.[41] The point here is merely to stress what is doctrinally at stake, namely the paradoxical use of competition policy to circumscribe the public domain.

With this in mind, let us now examine how the paradox might be rationalized, beginning with a "consumer welfare" perspective.

Section 2. Free-riding and "consumer welfare"

Over the last two chapters, we have seen that our upstream worries can be squared within a "consumer welfare" narrative. In fact, harm can quite easily be rationalized when the paradigm is taken to mean *strong* consumer surplus or consumer choice. For it can always be intuitively argued that when they victimize dependent providers, platforms will decrease choice, variety, and/or innovation in the long run. "Consumer welfare" – while it might rest on normatively questionable foundations – has so far not proven to be conceptually impotent. The real difficulty is formalizing upstream power plays in a way that passes the consensus rigour test.

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38 Some will take offence at this characterization because genuine property rights have erga omnes effects. However, property has also been described as a 'broad and roomy concept' (*see* Merges (2011) 4). I use it here only to make the point that with free-riding claims, antitrust is called upon to justify some form of exclusion, which is the core feature of any property entitlement.

39 Van Dorpe (2017) (reporting comments made by Cyril Ritter, an official of the EC's competition directorate).

40 *See* Schmidt [2019] 451, 455-460.

41 *See* ch 7.

This section shows that something similar can be written of scraping and Sherlocking. There will be a slight twist, though; 'free rider concerns do not become decisive simply because they can be articulated'.[42]

A) Scraping

1. Prolegomenon

Foreclosure, as noted in Chapter 4, is the go-to theory of harm for single-firm abuses. When players are excluded from the market, choice and diversity take a hit. And if they were efficient, prices might creep up and output may nosedive as well. This is not, however, the story claimants and competition agencies are spinning when it comes to scraping.

For instance, in the US, the FTC's early-2010s probe 'considered whether this conduct could have diminished the incentive of Google's rivals to invest in bringing new and innovative content and services to the Internet in the future or reduced Google's own incentive to innovate in the relevant markets'.[43] Likewise, in the EU, the EC has made it clear that its own investigation into the platform's unauthorized use of third-party content is about protecting 'incentives to invest in the creation of original content for the benefit of internet users.'[44] And, in Brazil, had the complainant adequately established that Alphabet/Google was lifting product reviews from its price comparators, incentives to innovate would have canalized the CADE's attention.[45]

Innovation, then, is the common thread behind the "consumer welfare" anxiety over scraping. Alleged victims and antitrust authorities are not alone in voicing them;

42 Hovenkamp [1995] 1, 96.
43 FTC statement (2013a) 3.
44 EC memorandum (MEMO/13/383).
45 *E-Commerce/Google* (n 16) para 144.

a few academics have been singing a similar tune.[46] Antitrust discourse of late has surely been featuring theories of harm focusing directly on innovation.[47]

Some have said decision-makers should stay clear of them. For one, the harm would be impossible to prove unless the requisite legal test(s) were set at a ridiculously low level.[48] For another, accepting such theories would effectively turn property systems on their heads.[49] Both objections are founded. Even so, they relate to how antitrust should respectively be enforced and interfaced. These are issues addressed in the final two chapters of this thesis. Again, at this stage, our discussion still centres solely on the question of theory-building: can we make a potential innovation argument out of scraping?

2. Innovation theories

Let us return to the three most publicized antitrust scraping allegations, namely those of reviews sites' content, stock imagery and news publications. To be sure, every situation involves distinct legal and economic contexts that need to be accounted for. Nevertheless, the structure of the incentives-to-innovate tale buttressing each claim is identical. Prosaically: scraping generates a substitution (ie business-stealing or traffic-diverting) impact that overrides any potential complementary (ie traffic-boosting) and market-expansion effects it might incidentally conduce. This, in turn, leads to lower revenues for providers, which then dampens their incentives to innovate.

Take the case of news articles, which – unlike the other two – has attracted scholarly attention from economists.[50] Theoretically, scraping can be a boon for media

46 *See* notably Shelanski [2013] 1663, 1700.
47 *See* eg the collection of essays in Nihoul and Van Cleynenbreugel (2018).
48 Colomo [2016] 201, 215.
49 ibid 217-218.
50 The models consider news aggregators like Google News. They are nonetheless relevant because general search engines like Google Search display the same kind of snippets (*see* similarly ACCC (2019a) 230).

organizations. Press snippets displayed by, say, Google Search, might pique the interest of consumers enough to generate a click-through to the publisher's website. The influx of traffic could then be converted into two potential revenue sources: advertising – from the landing page and, should consumers so navigate their way, from other pages, such as the prized homepage[51] – and/or subscriptions sales. Moreover, if this positive traffic effect also accrues to smaller, more specialized or obscure publishers (ie the long-tail), scraping would further expand the market, increasing media diversity and consumer choice.

According to economists, however, such a "win-win" outcome is contingent on consumer click-throughs – something the design and relevance of snippets may considerably influence.[52] Therefore, and although this is *not modelled*, publishers' incentives to invest in high-quality content could diminish if consumers generally end their reading experience on the search engine because they get the gist of an article's substance from the displayed extracts. Worse still, scraping might be problematic despite consumers clicking through to publishers' websites since referral traffic to single articles may insufficiently compensate lost homepage traffic and its potentially associated revenues.[53] Adding insult to injury, the practice might even dilute the brands of certain news organizations. Commoditization could then compound this double substitution effect and further erode publisher incentives to invest.[54]

A similar narrative can be deployed for stock imagery. If consumers can use image search platforms like Google Images to not only discover, but to easily copy imagery as well, it is no stretch to theorize how content providers may become

51 *See* Athey, Mobius and Pal (2017) 14.
52 *See* Dellarocas, Katona and Rand [2013] 2360.
53 *See* Jeon and Nasr [2016] 91.
54 *See* Athey, Mobius and Pal (2017) 27.

discouraged.[55] Scraping might negate the need to navigate to the original website, thereby depriving its owner of traffic, data and potentially associated revenues. Likewise, "framing" – a linking technique which makes third-party content an integral part of one's own website – is liable to rob providers of their recognition.[56]

And more of the same for review sites, which may be further harmed if scraped content is then repurposed in an inaccurate or misleading way, or worse yet, passed off as if they were original.[57]

In short, it is possible to make a competition problem out of scraping by relying on innovation concerns – as we have seen, it always is. This notwithstanding, there are things to say about the partly formal, partly intuitive theories of harm, which ground them.

Consider the case of review sites content first. There is no publicly available independent study quantifying the traffic effects of scraping by, say, Alphabet/Google, of Yelp reviews, let alone one that directly correlates the behaviour to reduced revenues and investments. Of course, some may object to this assertion. Did the FTC legal staffers not confidentially opine that the 'natural and probable effect of Google's [scraping] is to diminish the incentives of vertical websites to invest in, and to develop, new and innovative content'?[58] Undeniably, they did. Yet, their conclusion does not seem based on anything other than (informed) intuition. It also sits uneasily with the confounding statements made by then-Commissioners Rosch and Ohlhausen. Both affirmed that the FTC's investigation had revealed two things. One: 'overall traffic to the alleged victims increased substantially while the alleged scraping was occurring and

55 Getty Images (2018) 7.
56 ibid.
57 FairSearch (2011) 30.
58 FTC Bureau of Competition (2012) 40.

traffic to these websites from Google grew at an even faster rate'.[59] And two: harm to innovation was 'likewise lacking in factual support';[60] victims had actually 'continued to thrive and expand […] since this conduct occurred'.[61]

At the other end of the spectrum, by contrast, evidence appears to substantiate the existence of a traffic-diverting effect in the context of image search. A report by the audience development firm, Define Media Group, examined the impact on 87 websites of Alphabet/Google's 2013 decision to frame high-resolution pictures directly within the user interface of its image search platform infrastructure. The results? A collective drop in referral traffic of 63% in the first full week of the update, with no signs of a rebound after a further eleven weeks.[62] The report concludes that '[i]t's difficult not to consider Google's Image UI change a shameless content grab – one which blatantly hijacks material that has been legitimately licensed by publishers so that Google Image users remain on their site, and are de-incentivized from visiting others.'[63]

Finally, what of news? Here the canvas is murky. On the one hand, field experiments by some economists suggest that the amount of information news aggregators offer regarding articles does affect the probability consumers will navigate to publishers' websites.[64] More specifically, lengthier snippets and those coupled with images are found to increase the likelihood that consumers will devote their limited attention exclusively to scraped – as opposed to original – content.[65] According to the EC, furthermore, '47% of consumers browse and read news extracts on these websites without clicking on links to access the whole article in the newspaper page, which

59 FTC statement (2013b) 4. *See* also FTC statement (2013c) 1-2.
60 ibid.
61 ibid.
62 Abbas (2013).
63 ibid.
64 Dellarocas and others [2016] 2457.
65 ibid (noting, however, that when several articles compete with each (because they cover the same story), consumers are more likely to click on the link which provides a longer snippet and includes an image).

erodes advertising revenues from the newspaper webpages'.[66]

On the other hand, these results must be taken with a grain of salt because they suffer from severe limitations.[67] Plus, they are contradicted by a string of other empirical studies[68] and by confusing allegations made by certain press publishers themselves,[69] which all evidence scraping's complementary (as opposed to substitutive) impact.[70] As the ACCC summarizes, '[t]he presence of snippets *does* affect click-through rates [but one can] *not agree* that longer snippet lengths necessarily have a negative effect on referral traffic'.[71]

So, where does all this leave us? Scraping evidently can damage platform-providers' ability to monetize their content. And a magnanimous antitrust decision-maker guided by *strong* consumer surplus or consumer choice should be able to see a competition problem in this since innovation is potentially at risk. The incentives-to-innovate theory of harm, though, will not play out in all circumstances. Moreover, the theory is not a particularly robust one as it is not empirically substantiated. It also relies on assumptions that, while intuitively sensible, are questionable. Let us briefly unpack this assertion.

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66 EC SWD(2016) 185.

67 For instance, Dellarocas, Mobius and Pal [2016] 2457 do not capture the positive complementary effect scraping does bring about. And the EC's assertion is inconclusive and somewhat misleading because it considers EU consumers' behaviours irrespective of the type of platform used to access news content.

68 *See* eg Athey, Mobius and Pal (2017) (finding, in particular, that (i) *overall*, news publishers experienced drops in referral traffic, which suggests Google News complements, rather than substitutes publishers; and that (ii) despite the existence of a substitution effect with regards to publishers' homepages, referrals to article pages more than compensate this effect); Calzada and Gil [2020] 134 (confirming the complementary (as opposed to a substitution) effect under a similar setup). *See* also Chiou and Tucker [2017] 782 (using a different setup but also finding a traffic-boosting effect).

69 *See* eg *Google-Snippets* (ch 2 n 132) paras 18-19 (publishers submitted evidence to show that snippets were essential for driving referral traffic from Google platforms).

70 However, caution is also warranted here. For eg, Athey, Mobius and Pal (2017) also find that scraping does negatively impact larger publishers because it reduces traffic to their respective website's homepage and undermines their curation role. This could be problematic if part of the long-term incentives for these publishers to invest in their brands comes from the way they curate news.

71 ACCC (2019a) 231 (emphasis added).

3. Creators, intermediaries and incentives

Whenever the scraping claim is invoked, it is often paired with a rhetorically powerful idea. Antitrust enforcement, the story goes, would be about safeguarding the incentives to innovate and livelihood of individual creators (such as journalists and photographers) above those of the organizations that publish and commercialize their content.[72] This proposition – which, as noted earlier, record labels could just as easily advance in the name of musicians to prompt antitrust enforcement against kingmaking streaming platforms – is problematic. For it rests on several assumptions regarding the dynamics of intellectual production and distribution many too readily accept as self-evident.

- Creator incentives and money

The first difficulty reflects a disconnect between the incentives-to-innovate rationale and the realities of creative practice. Indeed, neoclassical economic theory presupposes that monetary inducements are indispensable for stoking creativity and innovation. Yet, the soundness of this empirical claim is often debatable, however unsavoury reality may be.

Take photographers and the microstock industry for example.[73] The sad truth is that many professionals and amateurs willingly supply agencies like iStockphoto (which is owned by Getty Images), Shutterstock and Dreamstime for pennies on the dollar.[74] Given the production costs/royalties ratio, money is probably more a token of social and psychic validations than a (primary) motivation.[75] Even beyond microstock, significant anecdotal evidence suggests that what animates many professional

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72 *See* eg Stucke and Ezrachi (2017) 16, 20-21; Getty Images (2016).

73 Microstock photography is a segment of the broader stock photography industry where agencies like Getty Images license pre-produced still or video imagery for use in general publishing (eg by advertisers, book publishers, etc).

74 Johnson [2014] 1935, 1969-1970 (estimating that the average microstock contributor made about $3.11 per image in 2014, which – when computed into wages – amounts to $4.65/hour).

75 ibid 1971-1973.

photographers is less economic incentives than a burning obsession to capture and convey a story they are passionate about.[76]

Interestingly, a similar canvas can be painted for journalists who must likewise navigate the treacherous waters of a profession marked by very skewed supply and demand curves. Multiple studies indicate that 'few aspiring journalists in most Western countries choose a career in journalism because of its financial rewards'[77] and that 'non-material incentives are of relatively high value to most journalists.'[78]

Finally, while some consumers have claimed compensation from firms like Yelp for their reviews,[79] these allegations have been dismissed for lacking good faith foundations.[80] As sociologists have shown, out of all the motivations individuals may have for spending time and energy into reviewing products, money is just not one of them.[81]

To repeat, I am not saying this reality is *fair* – far from it – nor that rewarding these individuals should invariably be excluded. Echoing the sentiment of many IP lawyers, my point is instead to stress that the connection between monetary inducements and creativity is too often assumed rather than investigated.[82] Therefore, we cannot just take as given that antitrust enforcement over scraping on *innovation* grounds has (overriding) positive effects on the incentives of creators.

Granted, a simple retort would be to highlight the need for first-order intermediaries to recoup their investments without which passionate creators would arguably be unable to disseminate their works to the public. Stock photography

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76 *See* the various testimonies garnered by Laurent (2017) for *Time Magazine*.

77 Fengler and Russ-Mohl [2008] 520, 528.

78 ibid 529. *See* also Willis (2010) 1-11 (describing the lure of journalism as a combination of immaterial incentives, including 'the love of reading and writing', 'intense curiosity', and a 'desire to contribute to society').

79 *See* eg *Jeung v Yelp Inc* No. 15-CV-02228-RS, 2015 WL 4776424 (NDCal 2015).

80 ibid 3.

81 *See* McQuarrie (2015).

82 Cohen [2015] 1, 34.

agencies, some may for instance argue, do not merely enhance the discovery of photographers; they also expend greatly to provide valuable resources and technical service support to contributors, helping them develop their imagery and satisfy emerging trends in specific market niches.[83] The rejoinder brings us to a second set of problematic assumptions.

- Creators and first-order intermediaries

The incentives-to-innovate theory seemingly assumes that the interests of first-order intermediaries and those of initial creators are inevitably aligned. Again, this is something which ought to be examined, not glossed over. One should remember that the middlemen who profess their solicitude for creatorship are not creators. They are rather entrenched interests that will often unabashedly claim for themselves the status of creators-by-proxy.[84]

Consider the case of Getty Images. Before settling its dispute with Alphabet/Google, the stock photography agency regularly spoke on behalf of photographers whose livelihoods it accused the platform of endangering. However, Getty Images has itself contributed immensely to the chronic decline of professional photography by simply leveraging digitization to its advantage.[85]

Caution should thus be called for when it is suggested that supporting marketers through innovation-minded antitrust enforcement safeguards incentives to creative work just as it might do if creator motivations were directly attended to.

Now, suppose it was acknowledged that the innovation theory against scraping is only (or mainly) focused on first-order intermediaries. Shouldn't antitrust be there to protect their incentives to take risks? Policy-makers have certainly vindicated this

83 *See* DeFillippi and others (2014) 235-238 (examining the practices of Getty Images).
84 *See* Cohen (2016) 68.
85 *See* DeFillippi and others (2014); Waldfogel (2018) 154-159.

argument on numerous occasions, albeit usually with the backing of a democratic vote.[86] But they have done so while ignoring a generic feature common to all industries involving intellectual products: "Goldman's law", ie the impossibility of predicting the success of intangibles and what goes into making them successful to begin with.[87] The incentives-to-innovate narrative obscures this reality. So, while acknowledging the importance of first-order middlemen for the production and distribution of intellectual products, innovation-minded antitrust should not make the mistake legislators occasionally do when they endow them with property rights by overstating their role.

Consider database producers: back in 1992, the EC reasoned that the growth of a European market for information would require considerable investments in producing and marketing databases.[88] As a result, the EU voted legislation specifically aimed at incentivizing investors (which include our scraping victims) through the grant of sui generis property designed to ward off misappropriation by free-riders.[89] Regrettably, things have not panned out exactly as intended.

In 2005 (ie almost a decade after the legislation was adopted), the EC found that the protection (i) 'had had no proven impact on the production of databases';[90] (ii) 'comes precariously close to protecting basic information',[91] and that (iii) repeal should be seriously envisaged.[92]

Admittedly, the legislation is still in force today. A 2018 review commissioned by the authority is no more upbeat, though. Worse, it concludes that '[t]he Commission may want to consider abolition. There is no evidence that the sui generis right has had

86 *See* Lemley [2005] 1031.
87 *See* Waldfogel (2018) 3. *See* also Cohen [2015] 1, 37-39.
88 *See* EC (1992).
89 *See* Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases [1996] OJ L77/20, recital 39.
90 EC (2005) 20.
91 ibid 24.
92 ibid 25-26.

a positive effect. There is evidence that it causes problems. There is evidence that it is not needed in the US.'[93] Furthermore, the report notes the existence of a genuine concern over how these entitlements may negatively impact the investment incentives of other market players.[94] This brings us to the final set of difficulties flowing from the idea that antitrust enforcement against scraping would be really to protect the consumer's interest in innovation.

- Platform incentives

Conventional formulations of the incentives-to-innovate theory of harm seem to assume that only those of the alleged victims are worthy of protection. However, if "consumer welfare"-minded antitrust is serious about innovation then one fails to see why the incentives of powerful scraping platforms should be ignored. The conduct definitely will sometimes generate considerable dynamic efficiencies. For example, the ACCC found that 'Google's practice of [scraping news content] in organic search results enhances consumer welfare by providing context of the results to the user's query, and assisting the user in assessing the relevance of the results.'[95] Plus, had it known its behaviour would be sanctioned, maybe the platform would not have innovated in the first place or will cease doing so in the future. What should then matter is whether overall innovation is negatively affected.

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The emerging picture is ultimately somewhat hazy. Insofar as "consumer welfare" is taken to mean *strong* consumer surplus or consumer choice, it certainly is possible to frame scraping as an issue potentially ripe for antitrust enforcement. Innovation might

93 Fisher and others (2018) 126.
94 ibid 46-47.
95 ACCC (2019a) 226.

well be at stake here. But one should be wary of incentives-to-innovate theories increasingly invoked nowadays generally without a whiff of empirical evidence.

Scraping, we have seen, does not necessarily generate the traffic diversion effect that is presumed to starve allegedly victimized providers of their expected revenues. Nor does the behaviour invariably dampen the creative drive of individuals whose support is enlisted by immediate "victims" – namely, first-order intermediaries – under the pretence that both their interests always dovetail or that enforcing antitrust to protect them will also spark creation by those who they themselves depend on. And scraping does not inevitably harm the innovation incentives of first-order intermediaries in ways that should inexorably trump those of powerful scraping platforms.

Just to clarify, these observations are not to defend platform (mis)conduct; they are just to stress the care one should proceed with in making a *competition* problem out of scraping on *innovation* grounds.

This brings us back to the assertion made in the introduction. Scraping can be rationalized as a competition problem. "Consumer welfare", though, is probably not primarily at stake. Rather, as the then-president of the Italian competition authority stated in the aftermath of his agency's investigation into news scraping by Alphabet/Google, '[t]he main issue has to do with fair reward for online publishing providers and the economic exploitation of this work by other subjects.'[96] Whether or not the worry must be attended to, he rightly added, is for societies themselves to decide, perhaps by reforming their respective property systems.[97] The French, we saw in Chapter 3, have made such a choice with regards to press publishers following a collective decision made by the peoples of Europe.[98]

96 Catricalà [2011] 293, 293.
97 ibid.
98 *See* further ch 7 below.

B) Sherlocking

1. Prolegomenon

So much for scraping. What of Sherlocking? As noted in Section 1, the issue here does not relate to taking actual works of others to prop up one's own offering. The fear pertains instead to powerful platforms organically integrating their businesses by lifting the ideas and concepts of dependent providers to effectively enter into horizontal competition with them. Of all the behaviours examined so far, it is probably the most challenging one to rationalize as a potential competition problem.

Indeed, for many economists, 'if a dominant platform is vertically integrated but does not apply discriminatory practices, there is no harm to consumers or competition.'[99] This is because (organic) integration is usually viewed favourably as it tends to be driven by efficiency considerations[100] and entrepreneurial motivations.[101]

In the platform context, the positive narrative has a special spin. To illustrate, take Apple: in 2014, the firm simultaneously entered several niches of its app store when it introduced the Health app. This was a disruptive move back then because, while existing third-party solutions did enable consumers to track their health and fitness, none of them offered a complete picture. By pulling data from suppliers like Nike or Mayo Clinic, Health provided a complementary hub to consolidate everything into a single comprehensive interface.[102] Five years later, Apple added a free, accurate and privacy-friendly period tracker feature to its own offer. Effectively, it Sherlocked a concept pioneered by a firm called Glow, which companies like Flo, Ovia, and

99 van Gorp and de Bijl (2019) 18. *See* also Economides (1999) 211ff.

100 Like developing synergies, reducing transaction costs, improving coordination, eliminating double margins, and so forth.

101 van Gorp and de Bijl (2019) 17-18.

102 Welch (2014).

hundreds of other menstrual cycle tracking app developers had further tweaked.[103] Was the act guided by predatory instincts or by efficiency motives? Most likely the latter. Why? Because Glow was known to be vulnerable to hackers;[104] Flo had been exposed for its unsavoury data-sharing partnerships;[105] Ovia was suspected of being in cahoots with US employers tempted to engage in "menstrual surveillance" to alter the health coverage of their female staff;[106] and the overwhelming majority of existing alternatives were notoriously inaccurate.[107]

This is standard multi-sided market theory at play here: Apple needs to protect its OS and app store platform products from fragmentation. How? By ensuring that the right kind of suppliers are on board to match consumers who expect a 'base level of safety, security, privacy, quality, low costs, an intuitive user interface, and innovative, new features.'[108] For economists, Sherlocking is hence probably more (or just as much) about quality control of the platform infrastructure than monopolizing the space of providers;[109] it complements (perhaps poorly enforced) platform regulation and papers over what some might argue are government oversights.[110] As noted in Chapter 4, this is similar to what some studies find when Amazon data-twinks merchants who rely on its marketplace infrastructure.

The upshot, then, is that for antitrust decision-makers guided by the consumer surplus or total surplus variations of the "consumer welfare" paradigm, Sherlocking cannot seriously be seen as a potential problem. To be sure, it almost always raises the

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103 Neely (2019).
104 Beilinson (2016).
105 Schechner (2019).
106 Harwell (2019).
107 Moglia and others [2016] 1153.
108 ACM (2019) 22.
109 *See* Evans [2012] 102. *See* also Wen and Zhu [2019] 1336, 1363 (noting that Alphabet/Google's introduction of its own flashlight app might have been motivated by concerns over the privacy practices of existing providers).
110 *See* Rosas [2019] 319 (arguing that such femtech apps should more tightly regulated).

costs of victimized platform-providers; copycats of Apple, Amazon, Alphabet/Google, and Facebook (to name a few) will in all likelihood be cheaper and/or display some kind of quality improvement, pushing providers to do more to convince consumers. Yet, this generates particular concerns of foreclosure and innovation only the *strong* consumer surplus and consumer choice lodestars can capture. Let us examine these potential harms in turn.

2. Foreclosure theories

If a premium is placed on consumer choice and diversity, Sherlocking by a powerful platform is always intuitively troubling. Returning to our Apple illustration: although having their ideas lifted by the platform will not necessarily put incumbent fertility app providers out of business, many of them probably will fail. And those who do survive will certainly have had to work harder to attract consumers even if Apple is assumed to not self-preference its in-house productions within the App Store; brand recognition and superior advertising presumably are powerful pull factors in their own right.[111]

This notwithstanding, recall that a similar narrative was briefly mentioned in Chapter 4 with our Amazon/Fortem example. There, it was argued that, given current knowledge, instinctive foreclosure theories would have serious difficulties passing the rigour test. Here, formal research in the context of mobile apps allows us to push this intuition further.

App providers compete in a crowded "superstar" app economy where a small minority reaps the majority of rewards.[112] To get the attention of iPhone users, these suppliers need to go through Apple's app store and advertise their offers as much as they can afford to.[113] Given such market dynamics, reports of ubiquitous "copycatting"

111 *See* Moorman (2018).
112 *See* ACM (2019) 24.
113 ibid.

are not really surprising.[114] Copycats – by definition – borrow heavily from what is already on the marketplace. Still, unlike those of third parties, Apple's in-house productions will assumedly (i) not be deceptive (be it by their appearance or functionality) and (ii) meet decent quality standards. This is important because researchers have empirically demonstrated that copycat apps can have a (more or less) business-stealing *or* sales-boosting effect depending on their quality and imitation type.[115] More specifically, low-quality imitations and those that are deceptive – even when of a high build – tend to *increase* the sales of originals.[116] Only copycats that combine high-quality *and* low levels of deception cannibalize the revenues of innovators.[117]

In short, Apple's ability to Sherlock the apps of providers who depend on its app store has *conceivable* exclusionary effects, regardless of whether its motivations are predatory or socially benevolent. But the foreclosure theory only bears out when the platform's copycat satisfies the consumer's short-run preference for superior products. To rationalize a "consumer welfare" problem with Sherlocking, one must therefore be guided by a desire to preserve consumer choice and diversity for their own sake. For either there is a speculative worry that, by offering superior copycats within its own infrastructure, the platform will eventually lock-in consumers to the point of driving out (potentially superior) competing *platforms* (say, Alphabet/Google's Android OS and Play Store products).[118] Or else the focus is solely on preserving atomistic market structures *within* the platform infrastructure itself.

These are not the foreclosure effects economists and contemporary "consumer

114 *See* eg Dredge (2012).
115 Wang, Li and Singh [2018] 273.
116 ibid 285-286.
117 ibid.
118 *See* eg ACM (2019) 58.

welfare"-minded antitrust decision-makers usually fret over. In the US, the FTC made this abundantly clear in its (in)famous 2010 *Intel* consent decree.[119] Intel – whose microprocessors often are non-digital, multi-sided, platform infrastructures[120] – is, in fact, explicitly permitted to Sherlock the concepts of other firms. That is, provided its copycats are not somehow predatory.[121] By the FTC own terms, enforcement could not even be contemplated if, for instance, Intel Sherlocked (before 29 October 2020)[122] the software development tools supplied by a company called YoYo Games, whose *GameMaker* suit is highly touted by gaming app developers.[123]

Intel, incidentally, had a rich history of Sherlocking the concepts of many of its dependent providers even before its discount practices attracted antitrust scrutiny in the aforementioned case.[124] Intriguingly, though, empirical studies examining the firm's entry patterns between 1990 and 2004, show that it was particularly wary of antagonizing its base of complementing suppliers. During this period, Intel mostly Sherlocked the concepts of those whom it thought were underperforming.[125] The firm would nonetheless occasionally invade the turf of providers whose products were also hardware platforms, such as motherboards or chipsets.[126] Yet, when it did, Intel made sure not to put the squeeze on them; instead, it actively relinquished its IP and subsidized competitive entry.[127]

These findings are compelling for two reasons. Firstly, they suggest that, much

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119 *Intel Corporation* 150 FTC 473 (2010).

120 Contrary to what may be assumed, Intel chips are often not just inputs for PC suppliers (cf Hagiu and Spulber [2013] 933, 935). This is because app developers *do* make investments or design choices specific to the microprocessors embedded in computers like smartphones, tablets, video game consoles and so forth (*see* Cohen and Wang (2014) 19).

121 *Intel Corp* (n 119) Part V, A).

122 The order expires on this date.

123 *See* Dealessandri (2020).

124 For a detailed list, *see* Gawer and Henderson [2007] 1, 27-28.

125 *See* Gawer and Cusumano (2002) ch 4.

126 *See* Gawer and Henderson [2007] 1.

127 ibid.

like other multi-sided platform practices, Sherlocking is probably best accounted for by a narrative of mixed motives. Secondly, the results offer actual support for the theory one can always intuitively, but rarely rigorously, formulate when it comes to upstream platform power plays, namely lowered platform-provider incentives to innovate.

3. Innovation theories

Unlike most other platform practices explored so far, a theory of harm to innovation can be formalized with regards to Sherlocking; we do have theoretical economic models that rigorously identify specific conditions under which lowered provider incentives to invest is a credible outcome.[128] Platform advocates, however, would probably question their applicability to the contexts under discussion here. They would note that the firms coming under fire for Sherlocking suppliers are being targeted in their capacity as *multi-sided* platform operators.[129] Unfortunately, none of the aforementioned models factor genuine multi-sidedness into their theoretical analyses.[130] And, while there are others that do, these ignore the impact Sherlocking may have on providers' incentives to innovate.[131]

Having said this, a burgeoning stream of research is looking at the issue from an empirical perspective. As noted earlier, some academics have examined Intel's Sherlocking patterns. Their findings support the harm-to-innovation narrative. They

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128 *See* eg Farrell and Katz [2000] 413, 418, 424 (where a key condition is that the monopolist in market A must Sherlock its way into market B with a copycat that is inferior from a quality perspective); Choi, Lee and Stefanadis [2003] 21 (whose findings depend on the cost of R&D (which is presumed to be fixed) and on the assumption that the monopolist is less efficient than the providers it Sherlocks); Miller [2008] 387 (where the key forces that drive lower innovation predictions are the uncertainty inherent in the innovation process and differences in the firms' entry costs; Liu [2016] 88 (whose prediction of lowered investments is predicated on the assumption that innovation is only important in the upstream market).

129 Notwithstanding the lack of consensus on what constitutes a multi-sided platform, economists would generally agree that Amazon's Marketplace, Apple's iOS and App Store, Facebook's eponymous social media, and Alphabet/Google's Google Search are all multi-sided infrastructures.

130 These models take a single-sided approach and ignore issues of cross-sided network effects central to multi-sided market economics.

131 *See* eg Hagiu and Spulber [2013] 933.

also show, though, how the firm took steps that successfully mitigated the potential problem. Luckily, these insights can be bolstered by more recent work, which may be even more relevant because they test the theory on the platforms currently in the limelight.

One of them examines Alphabet/Google's entry into the "Flashlights", "Guided Access" and "Podcasts" segments of its app store infrastructure.[132] The authors find that entry and the threat of entry had ambiguous consequences. On the one hand, both led to decreased innovation efforts in affected niches and inflated prices;[133] on the other hand, they also encouraged affected developers to (i) shift their innovation efforts to other, currently under-served or inexistent, segments, and to (ii) reduce wasteful efforts in developing redundant products.[134] Moreover, Sherlocking and its threat were found to induce potential short-run benefits for consumers: impacted developers who had strong products actually increased their innovation efforts in the affected market without hiking prices.[135]

Another study also uses Alphabet/Google as a test subject, examining its Sherlocking of photography app providers.[136] It shows that the behaviour expanded the market by drawing more consumer attention and growing demand.[137] In turn, this stimulated cross-sided network effects, which positively impacted innovation (measured by the introduction of a major update), albeit mostly by larger and more diversified developers.[138] Significantly, the authors note that their paper complements and supports the work of two colleagues who had found that Facebook's integration of

132 Wen and Zhu [2018] 1336.

133 ibid 1349ff. Innovation efforts were measured by looking at the frequency of app updates released by providers (such as adding new features, redesigning the interface and fixing bugs).

134 ibid.

135 ibid 1358.

136 Foerderer and others [2018] 444.

137 ibid 453, 457.

138 ibid 453-454, 457. Note that unlike Wen and Zhu [2018] 1336 whose study covers a three-year period, this model only examines innovation effects over six months.

Instagram – that is, entry through corporate merging rather than Sherlocking – had similar consequences: more innovation from large third-party providers of photo- and video-sharing social apps, but less from smaller ones.[139]

These results can be further nuanced by considering those of a fourth study, which compares the impact of Apple and Alphabet/Google's Sherlocking of health app providers.[140] It finds that while, overall, affected suppliers tend to suffer from the behaviour, negative innovation effects vary from one app store to another and depend on developer-specific features. For example, Sherlocking by the more open and flexible app store operator (ie Alphabet/Google) even had positive consequences for incumbents who experienced a significant uptick in downloads.[141]

Bearing this in mind, what conclusions should we draw? To me, there are three.

One: Sherlocking conceivably – perhaps plausibly – dampens app providers' incentives to innovate. This intuition can be both rigorously formalized and probably extended to other segments of the platform economy, such as online marketplaces for tangible goods. Recall from Chapter 4, there is at least one empirical study finding that Amazon's data-twinking – which is Sherlocking plus the data-advantage component – 'discourages third-party sellers from continuing to offer the products.'[142]

However, two: we cannot say these negative effects are likely.

By contrast, three: Sherlocking's overall impact on innovation is in all likelihood ambiguous. Providers are not all affected in the same way and platform incentives also need to be accounted for by "consumer welfare"-minded decision-makers seriously committed to innovation.

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139 *See* Li and Agarwal [2017] 3438.

140 Kang [2017] 11205.

141 ibid 11216 (finding that Alphabet/Google's entry increased downloads of affected apps by 32%).

142 Zhu and Liu [2018] 2618, 2632.

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To summarize our discussion of Sherlocking, one can definitely rationalize rigorously the practice as a potential competition problem "consumer welfare"-centric antitrust should be sensitive to. Once debatable normative foundations are assumed away, the paradigm – again – cannot be vilified for being conceptually blind to the upstream. Nevertheless, we need to be clear on which version of the lodestar is at play and the implications thereof. For Sherlocking is only really worrying if "consumer welfare" means *strong* consumer surplus or consumer choice. This is because platforms that vertically integrate by free-riding on the ideas of independent providers will almost certainly generate static efficiency gains benefitting consumers in the short-run. To be sure, exclusionary effects are likely and lowered producer incentives to innovate are plausible. Yet, the foreclosure of inferior firms and speculative anxieties on innovation are not things decision-makers guided by the consumer or total surplus offshoots of the paradigm would lose sleep over.

The foregoing notwithstanding, one should have reservations about pegging Sherlocking to "consumer welfare" harm. Granted, issues of consumer choice and diversity certainly do fit the bill. Even so, both can just as easily serve to push a narrative genuinely grounded in fairness-to-consumer considerations – *strong* consumer surplus or consumer sovereignty – as they might be deployed as Trojan horses to funnel a fairness-to-provider lodestar through the backdoor. To say that leveraging the public domain to organically integrate a business is only problematic when one is a powerful (platform) firm because this will somehow lead to a less plentiful marketplace, is indeed no different from suggesting that incumbent suppliers should be protected for their own sake. Since evidence on the behaviour's innovation implications are ambiguous, it is likewise difficult to ward off suspicion that the real

(or at least primary) issue at stake is not consumer, but rather provider, welfare.

C) Summation

Taking stock of our discussion so far: many platform-providers (and their advocates) claim that scraping and Sherlocking are platform mischiefs ripe for intervention. Stripped of their rhetorical enhancers, these allegations entail turning free-riding, as such, into an antitrust offence. To a certain extent, one can formally rationalize this from a "consumer welfare" perspective. Several caveats are needed, though. Firstly, a competition problem is only seriously conceivable when the paradigm means *strong* consumer surplus or consumer choice. Secondly, given the evidence, there is a considerable risk these alternative lodestars could be used to cover concerns that do not really cater to the consumer's interest in having access to a more abundant and/or vibrant marketplace.

Mind you, we saw earlier how theory-building around fears of despotic and game-mastering platforms runs into similar, albeit less acute, difficulties. What the discussion here further confirms is that "looking up" with "consumer welfare" lenses in place always makes the inquiry uncomfortable if only because upstream platform power plays do not instinctively stand out as potential "consumer welfare" problems. As explored in Chapters 3 and 4, these practices offend first and foremost our intuitions on the constitutive values of the competitive process, namely freedom and EOp. However, things are slightly different with scraping and Sherlocking. Unlike despotic autocracy and game-mastering, to describe free-riding as inimical to competition as such seems disingenuous. Let me explain.

Section 3. Free-riding and fairness

A) Prolegomenon

In a landmark 1918 ruling, the SCOTUS condemned what, in those days, effectively amounted to news scraping.[143] There, the Court held that, although society had deemed it unworthy of property, the organized collection of news had required investments by the plaintiff that were presumably such as to warrant a time-limited, non-statutory, 'quasi property' right barring the defendant – and only the defendant – from free-riding on its competitor's efforts without authorization.[144]

IP and tort law experts know all about the *INS* decision. It was, after all, 'almost single-handedly responsible for launching the common law misappropriation doctrine into the world.'[145] But whenever these lawyers discuss the case, the name of one of the sitting justices nearly always comes up. Tellingly for our purposes, it is that of Justice Brandeis. Why is this noteworthy? It matters because Brandeis – the champion of those advocating for the "competitive process" approach to antitrust in the US – was the sole dissenting voice to the majority ruling. And his dissent was not merely to quibble. When it comes to competition, he wrote, '[t]he law sanctions, indeed encourages, the pursuit [of] profits due largely to the labor and expense of the first adventurer'.[146]

To be clear, Brandeis was not calling for unbridled free-riding. His view was rather that whether practices like scraping and Sherlocking are meaningfully unjust to "victims" is something society should decide for itself.[147] Yet, this argument relates to

143 *International News Service v Associated Press* 248 US 215 (1918) (hereinafter "*INS*").
144 ibid 236.
145 Wadlow (2010) 308.
146 *INS* (n 143) 259 (Brandeis dissenting).
147 ibid 257, 264 ('To appropriate and use for profit, knowledge and ideas produced by other men, without making compensation or even acknowledgment, may be inconsistent with a finer sense of propriety […]. A Legislature, urged to enact a law […] may prevent appropriation of the fruits of its labors by another').

what will be discussed in Chapter 7, namely interfacing different policy levers.

By contrast, Brandeis's earlier point is fundamental here because it seems to infirm the very idea that scraping and Sherlocking platforms can ever be chastised by a policy genuinely aimed at safeguarding the "competitive process". This sentiment finds further echo in a unanimous 1989 SCOTUS decision outlawing state anti-plug molding statutes on the grounds that 'imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.'[148] And US decision-makers are not alone in upholding such a view. For instance, in Australia, the apex court until 1986 once held that

> [C]ompetition must remain free: and competition is safeguarded by the necessity for the plaintiff to prove that he has built up an "intangible property right" […]. A defendant, however, does no wrong by entering a market created by another and there competing with its creator. The line may be difficult to draw: but unless it is drawn, competition will be stifled.[149]

Scraping and Sherlocking are thus difficult to square as potential competition problems under the "competitive process" paradigm at first glance. Even so, they *can* be upon closer scrutiny. To understand this, we must jog our memory.

Economic competition, as expounded in Chapter 2, can never be completely sundered from fairness considerations, lest it lose the right to be called competition at all. Nevertheless (as was also explained there), when antitrust aims to safeguard the "competitive process", it can directly attend to only one of justice's two dimensions, namely ex-ante (as opposed to ex-post) fairness. Put prosaically, this means decision-makers must be insensitive to even the most wrenchingly unjust outcomes of competitive interactions; their job is to prevent such situations from arising in the first

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148 *Bonito Boats Inc v Thunder Craft Boats Inc* 489 US 141, 146 (1989). These laws prohibited businesses from Sherlocking, or, more technically, from reverse engineering – direct molding – existing products to market their own versions. *See* further Carstens [1990] 167.

149 *Cadbury Schweppes Pty Ltd v Pub Squash Co Pty Ltd* (1981) 55 ALJR 333, 339.

place by ensuring that the playing field is as levelled as the societies they ultimately serve would have envisioned it to be.

Furthermore, recall that ex-ante fairness – EOp – can be usefully formalized to rationalize our upstream concerns.[150] As detailed below, one of the EOp theories outlined there can be deployed here. Its normative implications need to be discussed, though, because doing so confirms what has been argued all along: scraping and Sherlocking can be made out as antitrust-relevant problems; still, for most people, fretting over these practices really reveals a sympathy for the plight of platform-providers that is overwhelmingly (if not only) anchored by individual beliefs on *substantive* justice.

B) Free-riding and ex-ante fairness

1. EOp-sensitive antitrust recalled

EOp-mindful antitrust, as Chapter 4 explained, zeroes in on certain (dis)advantages players bring to the economic game, and tries to restore justice in the structure (or pattern) of outcomes (as opposed to their content). When construed narrowly, the policy's reach is unsurprisingly quite limited; criticism can only be levelled against powerful platforms that arbitrarily discriminate between their dependent providers or against them to favour their in-house productions. Even under a slightly broader formulation, EOp-sensitive antitrust would only be able to target powerful platforms whose digital infrastructures are effectively rigged in ways that prevent the "best" offers from succeeding within them. Put differently, this understanding of ex-ante fairness is offended when within-platform competition is uncoupled from merit due to the platform operator's behaviour.

150 Recall ch 4 text to 140.

These recollections should make one thing clear: neither scraping nor Sherlocking can easily be fitted in such formal EOp theories. As claimed throughout this chapter, when a powerful platform scrapes content from providers or Sherlocks ideas the latter embodied in their products, the issue is not that within-platform is no longer open to all, structured on merits and/or conducted so that economic agents deal with each other impartially to capture value. To wit, assuming consumers consciously plebiscite (for example) Alphabet/Google's scraping-enhanced lyrics service or Apple's copycat apps, the concern cannot be that within-platform competition was arbitrarily skewed or not based on merit. The worry is rather that these in-house platform productions will have benefitted from the platform's behaviour in a way that enables them to succeed without having to expend the same amount of *effort* as competing providers. From an EOp perspective, therefore, the only issue with free-riding platforms is that it disconnects the pattern of within-platform competition from considerations of *desert*.

Of course, there are substantive EOp theories that do (to varying degrees) integrate the idea that the structure of competitions should track effort: meritocratic-plus, Rawlsian and responsibility-sensitive formulations of the value.[151] However, it is difficult to see how scraping and Sherlocking could be described as potentially problematic under the first two. For one, the usefulness of meritocratic-plus EOp seems to be restricted to ex-ante regulation.[152] For another, Rawls would probably not have let considerations pertaining to effort prevail over things like performance in the final *EOp* analysis.[153] This leaves us with responsibility-sensitive EOp of which Roemer's account is the only plausible, antitrust-intelligible, option I have encountered.

151 ibid text to 172.
152 ibid text to 205.
153 *See* Mason (2006) 79. *See* also Scanlon (2018) 54ff.

2. Free-riding and Roemerian EOp

The idea that powerful free-riding platforms scourge the competitive process by compromising the ex-ante fairness which should exist is easy enough to understand if Roemer's specification of the ideal is espoused.[154] Recall that (under this view) the guiding moral premise is a desert-based belief: competition should be structured so that winners will be those who will have earned their position by "out-exerting" their rivals. Following the Roemerian algorithm, one could then depict Alphabet's scraping of Yelp reviews as being unjust because some of the success its Google Local+ service achieves is undeserved. More accurately, the level playing field in the local search space is arguably distorted since Alphabet/Google is riding on the coat-tails of Yelp's successful efforts to prop up its own local search offer.

Resorting to such a formulation of EOp, though, has certain normative implications we need to be clear on.

The first relates to how the theory is implemented. As noted in Chapter 4, Roemer's algorithm abstracts from the issue of determining what counts as a relevant exertion. According to him, our political institutions should settle this. In my modest view, there are at least three important ensuing challenges. One concerns legitimacy since antitrust decision-makers are often (rightly or wrongly) derided for their seemingly meagre democratic credentials.[155] Another relates to the risk of capture, given that, without clear guidelines, pressure groups can unduly influence our institutions. And finally, there is the second-best problem: assuming antitrust decision-makers could alleviate the first two difficulties, their decisions may then no longer

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154 *See* Fleurbaey [2014] 653, 672 (noting that the analysis of free-riding 'comes nicely close to recent development of theories of justice as equality of opportunity' to which Roemer is prominently associated).

155 *See* eg Townley (2018) ch 3.

faithfully track desert.[156]

The second normative ramification follows precisely from the last point: Roemerian EOp aims to ensure that the pattern of competition is sensitive *only* to effort. This is not something we should take willy-nilly. Viewed from an antitrust perspective, Roemer's vision is obviously just as (if not more) divorced from reality than the assumption of "perfect competition" used by mainstream economists; real-world economic competition is as much a game of effort as it is one of talent, ambition and chance.[157]

Yet, does this mean it makes no sense, as a matter of public policy, to implement decisions geared towards fostering competitive outcomes structured by anything other than merit? Not necessarily. As argued in Chapter 2, most antitrust systems around the globe are probably grounded in a foundational political decision, which mirrors a given society's vision of how competition should be *ordered*. In such systems, the competitive process is framed by rules actively designed by the polity, thereby reflecting the latter's idiosyncratic beliefs on how its economy should be structured. *Insofar as doing so would be consistent with the type of competition envisioned by the peoples they serve*, antitrust decision-makers would, accordingly, be justified in formalizing their anxieties regarding powerful free-riding platforms by resorting to Roemerian EOp. Evidently, only social-minded jurisdictions could be amenable to such a move.

Consider, for instance, the US and the EU. In the former, a tenet of antitrust law, which has survived the passage of time, prescribes that competition is to be won through 'superior skill, foresight and industry'.[158] To me, we can interpret this as the US

156 *See* Fleurbaey [1995] 25, 39.
157 *See* Hayek (2013) 234; Buchanan (1983) 58; Walzer (1983) 109.
158 *Alcoa* (ch 2 n 95) 430. For an illustration of the present-day relevance of this tenet, *see* eg Finch (2018).

citizenry's political decision to establish a system of ordered competition striving, as a matter of principle, to structure outcomes in a *meritocratic* way. Should this (still) be (plausibly) true,[159] then US decision-makers cannot appeal to Roemerian EOp (or perhaps any other substantive EOp theory) to address scraping and Sherlocking (or any other practice for that matter). Why? Because the ideal supporting the theory is fundamentally inconsistent with the one envisioned by the American demos – desert is not merit. The EU, by contrast, is a polity constitutionally bound to providing its constituents a 'highly competitive *social* market economy'.[160] What this means in practice is somewhat unclear, but it realistically would legitimate appeals by decision-makers to broader formulations of EOp. Didn't then-EC president Jean-Claude Juncker state that ensuring a 'fair playing field […] is the social side of competition law'?[161]

Several final words of caution are nevertheless order. First, despite its potentially intuitive allure, the idea whereby winners in the economic game should be those who (in Roemerian parlance) "try the hardest" is not one for consensus. For it demands that the inefficient, underperforming, haphazard, and/or unlucky undertakings should have similar prospects of success as the efficient, overperforming, well-organized, and/or lucky ones with the same motivation and drive to win.[162]

Prolonging this thought, effort may sometimes deserve attitudes of praise and admiration. Even so, to say desert should justify differences in economic success, or – to clear the path to the last difficulty – in rewards, is another matter altogether.[163]

Finally, Roemerian EOp ought not be invoked to dodge thorny questions of

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159 As Piketty (2019) explains, ideologies structure societies and their understandings of fairness. These, however, are not immutable. US decision-makers may thus very well be out of touch with ideological shifts of the American demos.

160 Art 3(3) TEU (emphasis added).

161 Juncker (2016) 11.

162 Arneson (2015) 29-30 makes a similar point.

163 *See* Scanlon (2018) 125; Fleurbaey [1995] 25, 40.

outcome justice – in particular those relating to *stakes* – which are beyond antitrust's remit.[164] Many will surely concur with the truistic suggestion that effort is often unjustly *rewarded*. Platforms maybe do capture too much value at the expense of their hardworking, upstream, vertical (and sometimes simultaneously horizontal) competitors (ie suppliers). Since this matter of stakes fairness is both controversial and sensitive, it is, however, tempting to just avoid it by conflating it with the issue of how patterns of outcomes are formed. For it is easier to assume that winners of a desert-based competition also deserve whatever rewards accompany their success than to deal with the harsh, but probable reality that the stakes are determined by the laws of supply and demand.

The takeaway from the preceding discussion is simple then. As suggested earlier, we can rigorously rationalize our free-riding platforms fears as potential competition problems under the "competitive process" paradigm. To do so, though, decision-makers must invoke an EOp theory which is so "Left"-leaning ideologically that allegations of power misuse will never be far behind in most present-day antitrust systems. The truth is probably that anxieties over scraping and Sherlocking will generally pertain more (if not only) to *substantive* justice than competition. Returning briefly to *INS* confirms this intuition.

C) Free-riding and outcomes fairness

INS's underlying rationale has always bewildered commentators.[165] To be sure, some have argued that the Court was guided by an incentives-to-innovate theory similar to those discussed in Section 2.[166] Yet, most experts agree that the judges were rather

164 *See* similarly Stigler Committee (2019) 36 ('there are sources of platform rents that society may determine through appropriate regulation should not be part of the winner's reward.')
165 Wadlow [2013] 649, 654.
166 *See* eg Posner [2003] 621, 627-628.

steered by their convictions over ex-post justice, although consensus splinters thereupon.

Some claim that the ruling was grounded in Locke's labour theory of value,[167] which (incidentally) is one of the most prominent outcome fairness-based justifications for private property rights.[168] The plaintiff in *INS* – by analogy our victimized platform-providers as well – are, under this account, entitled to relief because free-riding rivals deprive them of the fruits of their investments over which they enjoy a natural right by virtue of having infused the commons with their labour.[169] On a side note, such reasoning may have seduced the FTC legal staffers tasked with investigating Alphabet/Google's scraping of Yelp content. They indeed concluded that the behaviour 'sent a message to the broader marketplace that Google could, and would, […] extract the fruits of its rivals' innovations.'[170]

Pressing forward, *INS*, according to others, was rather underpinned by a logic inherent in the law of restitution for unjust enrichment.[171] The majority opinion's author, Justice Pitney, assuredly did admonish the scraping defendant for 'endeavoring to reap where it has not sown [and] appropriating to itself the harvest of those who have sown.'[172]

Finally, maybe *INS* was simply based on an inchoate understanding of substantive fairness.[173]

It is naturally beyond the scope of this work to go into more details. The point here is merely to buttress the argument made throughout this chapter. Whether impelled

167 *See* eg Baird [1983] 411.
168 *See* usefully Attas (2008).
169 Locke (1999) 115-126, spec paras 26, 40 and 42. cf Attas (2008).
170 FTC Bureau of Competition (2012) 90.
171 *See* eg Balganesh [2011] 419; Callmann [1942] 595.
172 *INS* (n 143) 239-240.
173 *See* Wadlow [2013] 649. *See* also Callmann [1940] 585.

by the gut or by formal reasoning, worries surrounding scraping and Sherlocking have, in the first instance, little (if anything) to do with "consumer welfare" or "competition as such". They are predominantly (if not only) about provider-oriented *outcome* fairness.

D) Summation

In sum, scraping and Sherlocking can potentially harm the "competitive process" just as they may decrease "consumer welfare". To formally reason the competition problem, one must nevertheless do one of two things: go against intuition and formal theory, which both primarily point to issues of substantive fairness that are beyond antitrust's reach; or endorse a vision of EOp that will be controversial at best – Brandeis, for example, would have certainly rejected it[174] – and compatible with only the most social-minded antitrust systems.

Concluding reflections

Dependent providers who fall prey to powerful scraping and Sherlocking platforms come across as the most sympathetic of victims. By so behaving, aren't these platforms obviously akin to parasites, stealing information they did not themselves labour to produce and reaping rewards they do not deserve? Relatedly, attention should be drawn to how value is currently distributed throughout the platform economy. For isn't something seriously amiss if, during the peak weeks of the first covid-19 wave, some of the largest platform firms were announcing hiring sprees and adding more market value whilst almost every other business was haemorrhaging cash and staff?[175] Still, to portray scraping and Sherlocking as if they are cardinal antitrust sins is to overindulge

174 *See INS* (n 143) 259 (Brandeis dissenting) ('competition is not unfair in a legal sence [sic], merely because the profits gained are unearned, even if made at the expense of a rival').

175 Dwoskin (2020).

in platform-bashing.

If one accepts the premise that competition policy must pertain to competition, these practices cannot be depicted as patently problematic. Likening them to theft may carry rhetorical sway, but 'analogy without theory is blind'.[176] Once examined for what they are – namely, instances of free-riding – the only thing conspicuous with scraping and Sherlocking is that they are what competition very often requires.[177] Rigorously making them out as competition problems, though, is possible. To do so, however, one must conjure theories of harm that will either be supported by ambiguous empirical evidence or be grounded in, at best, controversial ethics.

Interestingly, antitrust talk on these matters is somewhat reminiscent of several (in)famous 1970s cases, which pitted IBM against manufacturers of products that complemented its non-digital platform infrastructures.[178] These lawsuits, as seasoned antitrust observers will recall, targeted (at least in part) Big Blue's integration of concepts developed by producers of plug-compatible devices (like tape and disk drives) into its own mainframes.[179] Veterans will no doubt also remember that liability was never incurred.[180] The cases are nonetheless noteworthy because they were litigated in the cusp of two eras of US antitrust. One was hell-bent on preserving atomistic market structures; the other often embraces concentration on the promise of efficiency and low(er) retail prices. IBM's fortune was that the ideological tide had shifted towards the latter by the time the last gavel was struck.

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176 Dworkin [1997] 353, 371.

177 *See* Raustiala and Sprigman (2012).

178 *See* eg *Telex Corp v International Business Machines Corp* 510 F2d 894 (10th Cir 1975); *ILC Peripherals Leasing Corp v International Business Machines Corp* 458 FSupp 423 (NDCal 1978).

179 For a detailed account, *see* Cortada (2019) ch 12;

180 *See* eg *Telex* (n 178) 928*; ILC Peripherals* (n 178) (both reasoning that IBM should not be prevented from doing what was common practice in the industry, especially when its integrated product constituted an innovation). For a critique, arguing that these cases should have been judged against the "concentration-is-bad" standard which prevailed between the 1940s and the 1960s, *see* Sullivan [1982] 587.

Now, some may say '[m]any people would rather see a system that was less productive overall but forced others to do their "fair" share'.[181] True as this may be, a market economy where winning is pegged primarily to effort (as opposed to, say, performance) is not one many *majorities* in liberal democracies will have probably envisioned for themselves. And if the latter assertion is inaccurate, one should wonder why some of the free-riding "victims" of today are not also subjected to more antitrust scrutiny.

Consider Axel Springer, a vocal critic of Alphabet/Google's scraping of its content. As academics know well, a few publishers (including Springer) have long cornered the market for academic publishing. Ironically, their online journals are effectively multi-sided platform products just like the Google Searches of the world.[182] Here is what progressive Nobel economist Joseph Stiglitz has to say on this highly profitable oligopoly to which we have entrusted the dissemination of some of our most important ideas:

> The irony is that the publishers get the articles for free (in some cases, they even get paid to publish them), the research reported is typically funded by the government, the publishers get academics to do most of the editorial work (the review of the articles) for free, and educational institutions and libraries (largely government-funded) then pay the publishers. Their high prices and excess profits, of course, mean that there is less money to fund research.[183]

If Alphabet/Google is free-riding on Springer, therefore, so too is the latter "reaping where it has not sown". Yet, the point here is not to say none of the foregoing is troubling. It is rather to stress that being able to make competition problems out of powerful "Big Tech" platforms scraping and Sherlocking their way to success does not necessarily give license for antitrust enforcement. Theories of harm must be applied,

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181 Stewart (2009) 49.
182 *See* eg Jeon and Rochet [2010] 222, 224-225.
183 Stiglitz (2018) ch 3, text under n 86.

not merely because they can be, but because they make sense in a specific factual, political, economic, and legal matrix. Moreover, if the real issues relate mainly to value distribution and economic power as such, there is something to say about whether enforcing the policy should be envisioned at all. These last two observations bridge nicely to the final part of this thesis: how should we intervene to address the upstream concerns that have entertained us over the past three chapters?

PART III. INTERVENTION

Upstream platform power plays are potential competition problems. Recapping briefly what our discussion of platform despotism, game-mastering and free-riding has shown: antitrust enforcement against these practices can be rigorously rationalized. This can in fact be done even when some of them generate fears that overwhelmingly pertain to things which are, or at least should be, beyond the policy's purview. Diagnosing antitrust-relevant harm, more importantly still, is not contingent on a paradigm shift. To be sure, "looking up" with "consumer welfare" goggles on will never be a natural exercise. Lenses generally left unused – *strong* consumer surplus or consumer choice – will have to be more routinely fitted; greater resources will need to be put into getting the economics right; and rigour will sometimes have to be sacrificed when formal analysis is either unavailable or ambiguous. But none of this makes the "consumer welfare" ideal conceptually defective for diagnostic purposes. By contrast, the alternative "competitive process" lodestar, which does have the advantage of perhaps sounder normative foundations, would enable decision-makers to more solidly reason their upstream-oriented worries in a wider array of cases. Shifting paradigms, though, would also place antitrust on an uncharted path, which ultimately turns it into an overtly moral enterprise where economic science only serves as a backstop. Given the powerful technocratic forces that have driven the policy in recent decades, prospects for such a move seem dim.

All of this notwithstanding, the reality remains that our platform-providers have an antitrust leg to stand on, regardless of the policy lodestar one may be biased towards. What should judges and competition agencies hence make of the situation? Is the antitrust toolkit sufficiently flexible to redress our upstream concerns? Should

enforcement even be contemplated when push comes to shove? These questions frame the following discussion that spreads over two chapters.

Chapter 6 looks "under the hood" of the antitrust machinery, which is where our interest mainly lies. It shows how "looking up" can exacerbate key difficulties that have long been the source of occasional seize ups. Faced with the new market dynamics, should decision-makers tread the optimal, reasonable, or resolute route to redress, and what do these choices entail? As will be explained, responses will be coloured by one's beliefs on both the nature of antitrust as a tool – is it more policy (sensu stricto)[1] than law? – and the goal(s) it is taken to pursue.

Chapter 7 then addresses the issue of intervention itself. When it comes to dealing with the plight of platform-providers, we must keep in mind the pool of policy options. *Antitrust* decision-makers, it will accordingly be argued, must be wary of their solipsistic tendencies while remaining attuned to the strategic potential of their instrument. In other words, antitrust is not the only available lever of action, nor is it necessarily the (most) appropriate one, which does not mean it should be altogether foreclosed from the discussion.

[1] I borrow here from Kreis and Christensen [2013] 38, 40, who narrow down the concept of "policy" – broadly defined as 'instruments through which societies regulate and control themselves' – to capture 'the discretionary instruments of regulation that operate within […] confines of the law.'

CHAPTER 6. ANTITRUST'S INTERNAL QUANDARIES

Introduction

Competition laws around the world tend to be rubbery in their textual formulation and sector agnostic in their scope.[1] This makes them particularly resilient to technological evolutions that periodically upend existing market dynamics. Nuances aside, of course, they remain essentially proscriptive in nature, regardless of the normative end(s) that may be ascribed to them. To rephrase: antitrust is not in the business of actively promoting (let alone maximizing) consumer welfare[2] or competition as such.[3] It is, *in principle*, a 'regulative (not regulatory)'[4] policy that targets bad behaviour rather than undesirable market structures.

As observed in the general introduction, though, a new consensus is emerging: our digital markets have (or will) become durably colonized by powerful platforms. And their harmful exertions – including those directed at providers – must be urgently reined in. Antitrust, in this regard, is often seen as the go-to option. In fact, calls for its unthrottled activation have rarely been this loud.[5] And yet, the instrument's apparatus is notoriously complex and costly to operate.[6] There are enforcement standards which need to be set and respected (Section 1); a power radar must first register problematic forms and levels of economic power before intervention is considered (Section 2); and remedies have to be properly devised and implemented before enforcement can be deemed successful (Section 3). Therefore, what can, and should, our decision-makers

1 *See* eg Arts 101, 102 TFEU; ss 1, 2 Sherman Act.
2 *See* eg Melamed and Petit [2019] 741, 745-747; Fox [2013] 2157, 2159.
3 *See* eg Mestmäcker (2011) 42-44.
4 ibid 46.
5 *See* Stacey, Shubber and Murphy (2019).
6 *See New York v Deutsche Telekom AG*, 439 FSupp 3d 179, 186-187 (SDNY 2020).

do?

As this chapter aims to show, they have three enforcement options. One is to be "scientific" and strive for *optimality*. When followed to the letter, decision-makers' remedial discretion is considerably enhanced, but, paradoxically, their ability to find liability is limited. Another option, then, is to take a more *reasonable* approach that can enable potentially far-reaching interventions depending on the jurisdiction at hand and the specifics of its antitrust system. However, by placing a premium on systemic coherence, this route will sometimes markedly impede enforcement. There is also one last path decision-makers (perhaps) animated by precautionary instincts and wary of the erosion of public confidence can tread: *resolute* enforcement. In so doing, sweeping – not necessarily effective – redress can actually be quite swiftly achieved. For this final approach is laser-focused on realizing a specific outcome.

Which of the three options is preferable? Much like the goal(s) debate explored in Part I, we will see that the answer turns on belief systems. My own view is simple and dovetails again with the idea of a Procrustean dilemma. Optimal enforcement is both illusive and not necessarily desirable; but reasonable antitrust decision-makers have limited ammunitions to get the job done; at the same time, more effective resolute enforcement has a price liberal democracies should be wary of paying.

With this in mind, let us now begin our deep dive into the antitrust apparatus.

Section 1. What (kind of) enforcement standards?

The principle that saddles powerful businesses with a special responsibility less significant players escape is a mainstay in many antitrust systems.[7] As the ACCC noted,

[7] *See* eg Case C-307/18 *Generics (UK)* ECLI:EU:C:2020:52 [2020] electronic Reports of Cases, para 153; ACCC (2019a) 1; *E-Commerce/Google* (ch 5 n 16) paras 108-109. A noteworthy exception is contemporary US antitrust.

though, when it comes to platforms, it is difficult to determine precisely what standard of behaviour they are, or should be, meeting.[8] This observation plunges us into the thick of the antitrust machinery.

A) The (range of) options

Legal tests complemented by evidence precepts render our notoriously open-textured competition laws operational.[9] The former delineate the boundaries of lawful conduct and are a matter of substantive antitrust. They take one of two forms. Either a (categorical or qualified) *rule* (that ascribes in advance a legal consequence to the commission of a particular practice based on a premise about its probable effects);[10] or a *standard* (which conditions the (un)lawfulness of a given behaviour on an analysis of its probable effects).[11] As is well known, however, a hermetic distinction between the two categories is somewhat artificial;[12] both rules and standards can be simple or complex.[13] Plus, their respective triggers may be defined through clearly operational factors (making them structured tests), or with vague terms that might change from one case to another (rendering them unstructured).[14] These triggers relate to both the goal(s) antitrust is understood to pursue (as they determine what the relevant effects are for liability purposes) and the probability threshold that must be reached. From an enforcer's perspective, unstructured rules are highly appealing because they are mental shortcuts that can be wielded with a certain amount of discretion. Figures 6.1 and 6.2 recap what has just been recalled.

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8 ACCC (2019a) 1.

9 Both are sometimes denoted as "legal standards" and "evidence standards".

10 A categorical rule would be called "per se". A qualified rule can be denoted as "by-object", following EU terminology where it is more common.

11 In the jargon of EU competition lawyers, one would speak of an "effects-based" legal test. In the US, "rule of reason" is the employed terminology.

12 *See* eg Katsoulacos [2019a] 365, 371.

13 Kaplow [1992] 557, 589-590.

14 Colomo (2018) 67-68.

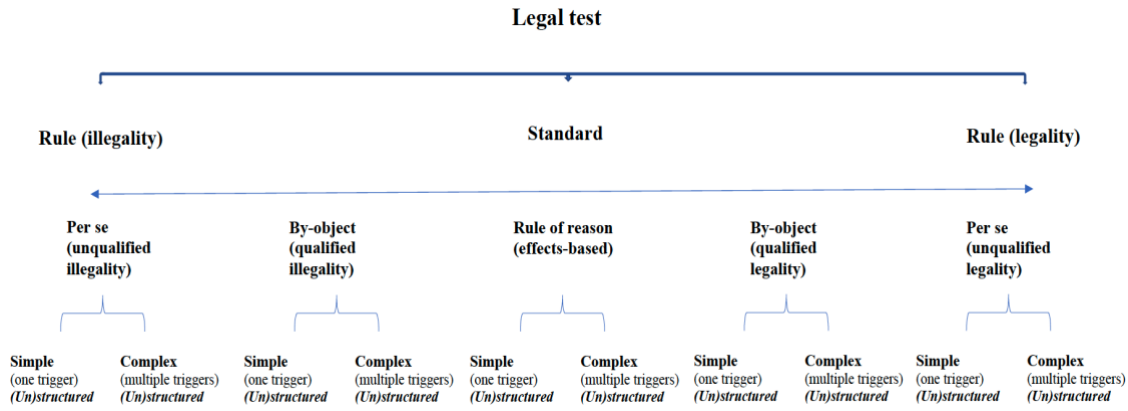

Figure 6.1 *Spectrum of legal tests*

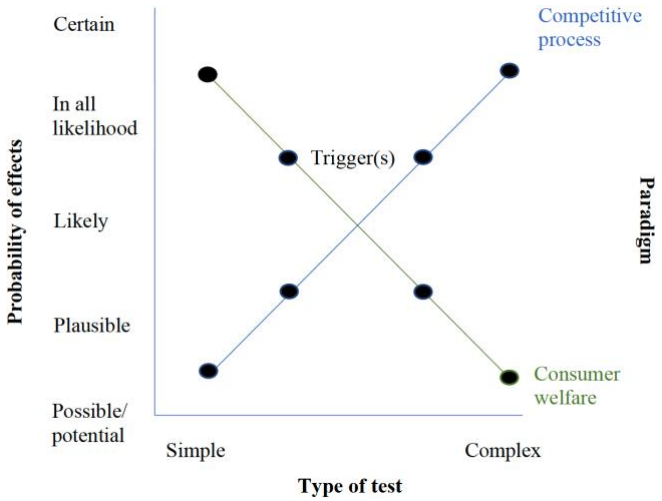

Figure 6.2 *Choices of rules and standards*

Evidence principles, on the other hand, are creatures of procedure. They provide decision-makers with devices enabling them to deal with the uncertainties and potential deadlocks the adjudicatory process entails.[15] These devices include the burden and standard of proof, as well as the principles governing the production of evidence and the appraisal of its probative weight. Given space constraints, only the first two – burden and standard of proof – will be discussed here, and even then, only marginally.

15 As Kalintiri (2019) 7 explains, 'evidence standards and substantive legal tests are not completely airtight.'

Rules on the burden of proof relate to its allocation. A distinction is generally made between the burden of persuasion (or legal burden), which is allocated to one specific party throughout proceedings, and the evidential burden (or burden of production), which may shift between litigants.

Regulation of the standard of proof (which pertains to the degree of evidence required for a claim to be deemed proven) is often framed in probabilistic terms, at least in common law jurisdictions.[16] Civil law systems, which are mostly unfamiliar with the concept, leave the issue of evidence sufficiency to the personal conviction of the decision-maker.[17]

With these refreshers in mind, one should have a clearer picture of the available options. In the abstract, it is possible to conjure a variety of configurations tailored to the different kinds of practices discussed in Part II. Some will doubtless argue that 'per se rules and presumptions of illegality must become the default in antitrust law.'[18] Others will advocate for the exact opposite.[19] Decision-makers (and their expert-advisers), by contrast, have been more nuanced, although a clear preference for more by-object legal tests is perceptible with some also defending lower standards of proof.[20]

This trend is noteworthy as it veers away from the general direction antitrust has taken in major jurisdictions where the bar for intervention has been (significantly) reinforced over the years. Take the US: it is common knowledge that rule-based legal tests are 'in disrepute'.[21] Likewise, commentators often argue that '[s]ometimes the burdens of proof imposed on plaintiffs at the behest of defendants are irrationally

16 *See* Katsoulacos [2019b] 125, 129. Common standards (associated with a progressively higher probability) include: "substantial evidence", "preponderance of evidence" (or "balance of probabilities"), "clear and convincing evidence" and "beyond reasonable doubt".
17 ibid.
18 Vaheesan [2019] 766, 823.
19 *See* eg Schrepel [2017] 103.
20 *See* Appendix C. *See* also Madero Villarejo (2019) 5.
21 Hovenkamp (2005) 116.

demanding'.[22] And while enforcement standards in the EU have undeniably been more conducive to intervention, the picture is considerably more nuanced than many commentators make it out to be. For one, the CJEU is growing increasingly suspicious of rule-based legal tests.[23] For another, the standard of proof is arguably close to what we would expect in criminal proceedings.[24]

Given the new market dynamics, the question, then, is whether the contemporary enforcement strategy is fit for purpose. As suggested earlier and explained below, the answer depends on how one approaches it.

B) Optimal, reasonable or resolute standards?

1. Optimal standards

The optimal approach is one many economists would support. Based on decision theory (ie error-cost analysis), they would have our decision-makers determine the kind and content of enforcement standards according to their respective, predicted, social costs. In a nutshell, the optimal standards (of liability and proof) for assessing a particular practice would thus be those that, overall, minimize two sets of costs. Firstly, those flowing from the decision-errors they will inevitably generate – namely, wrongful convictions (ie false-positives or type-I errors) and mistaken acquittals (ie false-negatives or type-II errors). Secondly, the administrative costs associated with establishing and operating these standards.[25]

Insofar as antitrust remains anchored in the "consumer welfare" paradigm, this approach would largely favour effects-based legal tests.[26] Not necessarily, mind you,

22 Gavil [2012] 733, 739.
23 *See* Vilaça [2018] 173, 183. *See* also Colomo (2018); Petit [2018] 728.
24 *See* Kalintiri (2018) 83ff.
25 The literature on this topic is vast and need not be reviewed here. *See* usefully Baker (2019) 73.
26 *See* eg Katsoulacos, Avdashevab and Golovan [2016] 277, 283-284; O'Donoghue and Padilla (2013) 225.

because of a belief that 'rules represent a bias, and only the rule of reason can adequately enable courts to make an appropriate decision in every case […] to achieve this goal.'[27] The logic would instead more probably rest on the idea that '[t]he error-cost framework calls for a more interventionist antitrust rule only when Type II error costs are substantial, there is a long-standing precedent indicating that the given practice is anticompetitive, and theory and evidence suggest a strong likelihood that the practice is anticompetitive.'[28] To my knowledge, those questing for optimal legal tests would not change their recommendation when it comes to platforms and their upstream exertions.[29] Moreover, as it relates to evidence principles, they would likely endorse more pro-*defendant* standards of proof.[30]

That said, only two brief remarks are needed. The first is that it is difficult to fault these recommendations. They may simply reflect the 'natural way for economists to function.'[31] Plus, the economics of upstream platform power plays, as we saw in Part II, are both relatively novel and quite ambiguous: there are potential negative effects, but they are not necessarily likely; and while the harm may be substantial, assessing magnitude is something for which analytical tools are still deficient.[32]

This brings us to the second observation. Regardless of the chosen antitrust paradigm, are optimal standards really desirable anyway? The approach is widely acknowledged to 'only rarely yield better than crude approximations'[33] because the relevant cost variables are 'difficult or impossible to measure'.[34] Its entire operation hence rests on assumptions about markets and institutions.[35] Yet, this means "optimal"

27 Schrepel [2017] 103, 114.
28 Manne and Wright [2011] 171, 180.
29 *See* eg Melamed and Petit [2018] 741, 767.
30 Mungan and Wright (2019).
31 FTC (2018a) 67 (intervention by Joseph Farrell).
32 *See* Cass [2013] 169, 197.
33 Posner [1973] 399, 402.
34 Hovenkamp (2005) 55.
35 Baker (2019) 74.

standards are mediated through ideology, not "science".[36] The approach's normative desirability, to my mind, can therefore only be seriously defended where the antitrust decision-maker consistently mirrors the popular will, at least on average.[37] This seems unlikely, at best.[38] Might it not be, then, more advisable to strive for *reasonable* standards?

2. Reasonable standards

a) Prolegomenon

The reasonable approach is one those obsessed neither by decision-makers' inevitable fallibility nor their conviction rates would presumably counsel. Its methodology is quintessentially legal, which is not to say economics-illiterate. As it concerns the standard of proof, it entails finding a balance between 'the minimum threshold of evidence sufficiency that can be tolerated from a fairness perspective against the maximum threshold respectively, beyond which the sustainability of the enforcement becomes threatened.'[39]

Regarding legal tests, the reasonable approach would consider the following factors:

- Error costs

Given the inherent limitations of decision theory, reason counsels an even-handed concern on false-positives and false-negatives, regardless of the goal antitrust is understood to pursue.[40]

- Rationalization tools

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36 *See* Lao [2014] 649, 666.
37 Similarly, Baker (2019) 65.
38 Verifying this empirically would, admittedly, be challenging.
39 Kalintiri (2019) 74.
40 *See* similarly Lowe (2007) 9.

A key factor in the choice between rules and standards revolves around how one rationalizes the competition problem arising from a particular behaviour. From this flows the premise (about the conduct's nature and effects) that will support the decision. Relevant harm can be explained informally, for example, by relying on intuition. Another informal analytical tool – a popular one with antitrust decision-makers – is "experience".[41] However, the reasonable approach would complement informal analysis with formal devices applied in a rigorous, non-selective, fashion.[42] Why? Because formal reasoning serves as a bulwark against arbitrariness. For enforcement would be arbitrary if legal tests were based on premises known to be incorrect and/or insufficiently nuanced.[43]

Advocates of this approach, though, might disagree on whether (neoclassical) economics should be the exclusive purveyor of wisdom. Antitrust is often – rightly in my view – depicted as a multidisciplinary field, even by economists.[44] To the extent competition as such – an overtly moral paradigm – is endorsed as the policy's lodestar, there is little reason to foreclose any other potentially useful discipline for rationalization purposes.[45] As our discussion in Part II shows, political philosophy can meaningfully inform our understanding of how business practices can harm ideals such as freedom and EOp. For sure, taking values seriously does not simply mean appealing to rigorously formulated theories to explain what may seem intuitively troubling; these theories must also be intelligible and compatible with what societies envisaged their respective competitive orders to look like. This brings us to the next consideration: coherence.

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41 *See* eg *Broadcast Music Inc v Columbia Broadcasting System Inc* 441 US 1, 2 (1979); *Cartes Bancaires* (ch 3 n 68) para 51.

42 Similarly, *see* BEUC (2019) 18.

43 Similarly, *see* Colomo (2018) 323.

44 *See* eg Budzinski (2011) 111.

45 Similarly, *see* Sullivan [1977] 1214; Foer [2011] 731, 732.

- Coherence

A reasonable legal test is not only informed by formal analysis; it is also coherent. In other words, it should "make sense" when viewed against the broader antitrust system of which it forms a part. How so? By being rationally related, instrumentally or intrinsically, to the values and principles that undergird it.[46] This rule-of-law imperative, admittedly, places significant constraints on the decision-maker's discretion, as illustrated in a moment. Yet, only through coherence can we ensure that our competition laws will evolve in a reasonably predictable and non-arbitrary way.[47]

Importantly, the requirement also arms the decision-maker with a limited justification for adopting a potentially inconsistent test.[48] As Neil MacCormick writes, '[c]omplete consistency is not a necessary condition of coherence, since unlike consistency, coherence can be a matter of degree.'[49]

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With these considerations in mind, what should this approach entail in practice when applied to our upstream platform power plays?

b) Application

- Standards of proof

Regarding, briefly, standards of proof, the institutional landscape will (or should) weigh considerably on what may be deemed reasonable. Take antitrust systems (like those in Europe) where enforcement relies primarily on administrative authorities carrying out

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46 *See* MacCormick (1983) 238; (2005) 48, 189ff.

47 *See* MacCormick (2005) 12, 16, 131-132. On the need for legal certainty in antitrust, *see* eg *Deutsche Telekom* (ch 4 n 133) para 202.

48 In the EU, the GCEU has stressed that EU institutions 'must, *as a matter of principle*, avoid inconsistencies that might arise in the implementation of the various provisions of European Union law.' (Case T-50/06 RENV *Ireland v Commission* ECLI:EU:T:2012:134 [2012] electronic Reports of Cases, para 62) (emphasis added)

49 MacCormick (2005) 190.

quasi-criminal proceedings. There, the public interest imperative of effective enforcement must be reconciled with the fundamental rights bestowed upon undertakings whose enjoyment may be at risk.[50] It accordingly makes sense to maintain high standards that, if not identical to those applied in criminal cases, may be flexible enough to be stretched close to them, which is what we currently find in the EU.[51] As one learned antitrust judge opined, in such a model, 'it is hard to conceive, at least in free democratic societies, that citizens and firms can be condemned on the basis of estimates, approximations or guesses, even if they are informed ones.'[52]

Some will no doubt argue that opaque and complex digital markets with platforms operating as "black boxes" are game changers justifying a more relaxed attitude. The issues examined in Part II definitely are challenging to detect;[53] few businesses will go to the length Genius did to make its case,[54] perhaps out of fear.[55] Nevertheless, improved whistleblowing schemes and information gathering powers for enforcers appear to be more appropriate solutions to this specific issue.[56]

- Legal tests

Regarding legal tests, several remarks are in order.

- The limits of the "consumer welfare" paradigm

The first – easily the most important one – is that, insofar as "consumer welfare" remains antitrust's paradigm, standards (as opposed to rules) are probably the only

50 In the EU, these would include their economic freedom and right to property, as well as their presumption of innocence (*see* Arts 16, 17, and 48 CFREU).
51 *See* Kalintiri (2019) 85.
52 van der Woude [2019] 415, 418.
53 *See* ACCC (2019a) 13, 139.
54 Genius had watermarked its song transcriptions with a Morse-code message to substantiate its claim that Alphabet/Google had scraped its content.
55 *See* EC SWD(2018) 9, 26.
56 *See* similarly CMA (2019) 26, 32.

reasonable way to go given *current* knowledge. A rule-based test (qualified or not) would indeed only seem reasonable where harm can be rationalized through formal analysis and predicted to be likely in most circumstances. This is surely what the CJEU has in mind when it states that to justify a practice

> [B]eing classified as a restriction of competition 'by object', without an analysis of its effects being required, there must be sufficiently reliable and robust experience for the view to be taken that that [conduct] is, by its very nature, harmful […].[57]

Yet, we saw in Part II that the motives and "consumer welfare" effects of upstream platform power plays are ambiguous. The issue of self-preferencing is illuminating in this regard.

Recall from Chapter 4 that the conduct's negative impact on consumer choice (through the foreclosure of efficient vertical search services) is possible, not likely. Similarly, harm to effective choice (and thus quality) may ensue in some cases, but not in others.[58] And while innovation can always be used as a trump card, empirical evidence is scant and no general analytical framework to support the theory exists. We just do not have the means to consistently conduct rigorous innovation assessments, a shortcoming economists readily recognize.[59] Worse, some say '[t]here is very little that is actually done in this',[60] which is precisely why contemporary "consumer welfare"-driven antitrust could, and perhaps can, only be about short-run consequences.

Still, maybe a lower probability threshold of effects should be set because the harm might be substantial. The argument looks sound prima facie. Upon scrutiny,

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57 Case C-228/18 *Budapest Bank* ECLI:EU:C:2020:265 [2020] not yet published, para 76 (approvingly citing AG Bobek's opinion, which argued that a consensus among economists on the inherently anticompetitive nature of a practice is of utmost importance to determining whether a rule-based test is justified).

58 For instance, cf *Google Search (Shopping)* (ch 4 n 72) paras 490-491; with *Streetmap* (ch 4 n 228).

59 *See* eg Stigler Committee (2019) 92; Kerber (2018) 35ff.

60 *See* FTC (2018b) 293 (intervention by Cristina Caffara).

though, it fails. For a legal test that merely requires relevant effects to be theoretically possible is a rule-based test in disguise.[61] Furthermore, measuring the magnitude of dynamic effects is not something economists have a good handle on either, as noted above. The CADE, for instance, recognized as much in its decision on scraping allegations against Alphabet/Google.[62] This difficulty, mind you, also harrows top-rated agencies like the EC.[63] Consider the latter's impact assessment accompanying its proposal for a now-adopted regulation aiming to ensure "fair" platform-to-business relations.[64] Initially, the document had been faulted by the EC's own independent quality control unit, the RSB. The reason? Evidence supporting the magnitude of innovation problems were insufficient and biased.[65] Although a subsequent version was ultimately green-lighted, the RSB remained mum on innovation effects.[66] Tellingly, the EC recognized that there were 'no robust quantitative estimates for these innovation dynamics.'[67]

Pushing the point further, one might seriously question whether innovation should at all play a direct role in antitrust given our current methodological deficiencies.[68]

- The scope of the "competitive process" paradigm

The second observation pertains to the kind of tests reasonableness recommends under the "competitive process" lodestar. As Part II showed, we can rigorously rationalize various upstream platform exertions as potentially inimical to the values inherent to this

61 *See* eg Case C-413/14 P *Intel* ECLI:EU:C:2016:788 [2016] not yet published, Opinion of AG Wahl, para 118.
62 *See E-Commerce/Google* (ch 5 n 16), para 144 ('it is difficult to assess how much has been lost due to a lack of incentives for innovation.') (free translation)
63 *See* GCR (2020) for an annual ranking of competition authorities.
64 EC SWD(2018).
65 RSB Ref.Ares(2017)5899542 2 annexed to RSB SEC(2018)209.
66 RSB SEC(2018)209 1-3.
67 EC SWD(2018) 29.
68 *See* Colomo [2012] 261, 263.

alternative antitrust paradigm. The issue, then, is one of coherence. Does it make sense to adopt more rule-based tests for these types of behaviour? The answer is likely to be jurisdiction- and conduct-specific.

Take our discussion on game-mastering tactics. These practices do generate legitimate antitrust anxieties because they can imperil the EOp that should prevail. As we saw in Part II, this value has several formulations. Each is undergirded by distinct ideals, which may not all "fit" within a particular legal order committed to competition. Coherence, however, requires the chosen EOp theory to 'hang together purposively'[69] with the roadmap a society will have (perhaps implicitly) stipulated, much like an economic theory should be based on realistic assumptions. This is why only social-minded polities like (maybe) the EU might be justified in appealing to substantive EOp theories to subject, say, self-preferencing *platforms* to a rule-based test even if the favoured in-house product is really the superior option.

The italicized emphasis is important, though, because EU lawyers will rightly note that the suggestion sits uneasily with positive law. To see this, mention must be made of *MEO.*[70] That case was about second-line price discrimination in the analogue world and its conformity with Article 102(c) TFEU. Yet, in articulating what looks like an unstructured legal test, the Court included a trigger which only makes sense in self-preferencing situations. More specifically, it stated that possible intent to foreclose a trading partner 'which is *at least as efficient* as its competitors' may also be relevant.[71] Beyond its ambiguous implications for kingmaking platforms,[72] the holding does clash with the idea of condemning platforms that harm providers by favouring *superior* in-

69 MacCormick (2005) 230.

70 Case C-525/16 *MEO* ECLI:EU:C:2018:270 [2018] electronic Reports of Cases.

71 ibid para 31 (emphasis added). The link to self-preferencing seems obvious. For when would the non-integrated firm know anything about the cost structure of its partners?

72 Ritter [2019] 259, offers an insightful comment.

house alternatives. So, how could this be justified? Keep in mind that our concern is coherence for which complete consistency is not an imperative. Therefore, if consensus is right and digital markets truly are different,[73] one could reasonably question whether applying *MEO*'s insights to platforms makes sense. *MEO*, after all, was probably premised on analogue-era knowledge.[74]

Be that as it may, several caveats would still be needed.

Firstly, given that these practices are likely to generate positive short-run effects, a qualified, rather than per se, liability rule would seem appropriate.

Secondly, coherence would also require consideration for the presumption of innocence. The latter is relevant as liability rules shift the *legal* burden onto the defendant to justify its behaviour.[75] For due process reasons, the *standard of proof* for *justifications* would hence need to be one of balance of probabilities (or its equivalent subjective conviction threshold).[76]

Finally, the rule does not necessarily have to be *simple*, which brings us to a final observation.

- The value of complex, but structured legal tests

As noted earlier, legal tests can be complex in that they can have multiple triggers. To ensure coherence while minimizing inconsistencies, reasonableness counsels that we rely on them and that we do so in a structured manner. Neither the kind of test (rule or standard) nor the policy goal ("consumer welfare" or "competition as such") should

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73 *See* introductory chapter text to n 35.

74 The CJEU approvingly cites the AG's opinion throughout its decision. The latter, though, was deeply sceptical as to the very rationality of the behaviour (*see* Case C-525/16 *MEO* ECLI:EU:C:2017:1020 [2017] electronic Reports of Cases, Opinion of AG Wahl, paras 54-55, 79). But we saw in Chapter 4 that *platforms* do have such kingmaking incentives.

75 This is explicitly recognized, for instance, by the German Draft reform bill that proposes to introduce in German antitrust law a qualified liability rule for, inter alia, self-preferencing and data-twinking by powerful platforms (*see* BMWi (2019b) 77).

76 *See* Kalintiri (2019) 55-56 and the literature referenced therein.

influence this. As Lon Fuller would say, the contrary – generalized ad-hocism – would be 'the first and most obvious way […] to fail to make law.'[77]

Consider, for example, the issue of despotic platforms explored in Chapter 3. As explained there, one can rationalize some of these worries under the "competitive process" paradigm. How? Through a theory of coercion that sees a competition problem in powerful platforms bullying providers into abstaining from exercising their legal rights. A simple liability rule would nevertheless prove contentious, even in jurisdictions like the EU where the threat to systemic coherence would be minimal.[78] Such a legal test, critics would say, extends the special responsibility saddling powerful firms beyond the realms of competition.[79] Additional triggers should thus be envisaged and clearly identified.[80]

One of them could relate to the range of rights whose violation might be relevant for antitrust purposes.[81] Another might involve introducing a causality requirement between power and conduct (or potentially reinforcing it where it already exists).[82] This is what the ADLC appears to have done implicitly when it took action against Alphabet/Google's for threatening the removal of press snippets in response to the

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77 Fuller (1969) 33, 39.

78 *See* Cases C-179/16 *Hoffmann-La Roche* ECLI:EU:C:2018:25 [2018] electronic Reports of Cases, paras 92-95 (holding that an agreement between pharmaceutical manufacturers to disseminate misleading information in contravention of pharmaceutical legislation can constitute an antitrust infringement "by-object") ; C-32/11 *Allianz Hungaria* ECLI:EU:C:2013:160 [2013] electronic Reports of Cases, para 47 (holding that an agreement between car insurers and dealers could constitute antitrust infringements "by object" when those agreements are contrary to national insurance laws).

79 *See* for eg *Facebook* (Case VI-Kart 1/19 (V)) ECLI:DE:OLGD:2019:0826.KART1.19V.00, para 44 ('the dominant company has a special responsibility only for competition, not beyond that for the observance of the legal system by avoiding any violation of the law.') (free translation)

80 cf Monopolkommission (2015) paras 523-528 (supporting per se illegality).

81 *See* for eg Lettl [2016] 214, 217 (arguing that only rules on market structure and/or market conduct should be relevant).

82 For instance, in the EU, while the issue is not completely unambiguous, it is generally accepted that there is no such requirement. It does, however, exist in German antitrust (which has long explicitly recognized the idea that breaches of non-antitrust laws can constitute antitrust infringements). *See* Lettl [2016] 214.

earlier-mentioned French copyright law reform.[83] The move evidently does open the door to a bevy of further questions[84] whose answers are likely to be jurisdiction-specific.[85] The point here, however, is precisely that we should have these discussions, especially when the upstream power play at hand is particularly difficult to square within either antitrust paradigm – think of free-riding practices.[86]

More generally, a reasonable legal test would also have an eye on remedies.[87] As will be explored in more detail shortly, a tricky challenge with enforcing antitrust to address upstream platform power plays is that (moderately) effective redress will usually have a proactive outlook to it. The ensuing incoherence can fortunately be mitigated with an appropriate liability trigger. An interesting option in this regard would be to introduce an "indispensability" screen when intervention would be proactive, ie structural or entail regular positive duties for the impugned platform.[88] Nothing revolutionary here, just a generalization of what is already implicit in EU and (albeit less perceptibly) US antitrust.[89] The rationale is both normative and practical. Normative, as the filter accounts for two sets of competing interests: fundamental rights versus competition and short-term versus long-term impact of proactive enforcement.[90] Practical, because proactive remedies are more costly to administer than most reactive,

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83 *Syndicat des éditeurs de la presse magazine* (ch 3 n 160) para 254.

84 For instance, a choice would need to be made between normative and strict causality, a distinction known to German antitrust lawyers. Strict causality means power is what enables the conduct (ie the conduct was available only to the powerful platform). Conduct is in a normative causal relationship with power when power is what causes the conduct to produce its anticompetitive effects.

85 For instance, it is well known that the US displays a judicial reluctance to penalize powerful firms for engaging in conduct lawfully available to smaller businesses. This attitude is not shared by the EU.

86 Similarly, *see* Nazzini [2015] 301, 310.

87 Similarly, *see* Areeda and Hovenkamp (1978) para 303c2.

88 Similarly, *see* Colomo [2019] 532, 536.

89 ibid 532ff (analyzing CJEU jurisprudence and finding that proactive remedies are available only when "indispensability" is part of the liability test). In the US, "indispensability" is implicit in the "essential facilities" doctrine. *See* Case C-165/19 P *Slovak Telekom* ECLI:EU:C:2020:678 [2020] not yet published, Opinion of AG Øe, paras 68-69, confirming both points.

90 *See* Case C-7/97 *Bronner* ECLI:EU:C:1998:264 [1998] ECR I-7794, Opinion of AG Jacobs, paras 56-57.

cease-and-desist, obligations.[91]

3. Resolute standards

Reasonable enforcement standards, obviously, can impede intervention. Decision-makers may then want to adopt a more resolute approach, one that is more attuned to the desired outcome.[92]

Recall, for instance, the *Navx* decision discussed in Chapter 4. There, the ADLC properly, albeit implicitly, identified the real crux of the problem behind Alphabet/Google's kingmaking, namely neutral EOp. The agency's choice of a qualified rule was, accordingly, reasonable. But the legal test was also crafted in an unstructured way, ie it shifted the legal burden onto the defendant to justify its conduct without, however, providing clearly operational triggers for qualified liability.[93] While understandably desirable from the enforcer's perspective, the discretion this entails likewise carries a considerable risk of unreasonable ad-hocism. Subsequent cases dealing with the same practice have shown how battered legal certainty becomes.[94]

The EU *Google Shopping* case offers another good illustration of this approach. Under its most plausible reading, the EC treated Alphabet/Google's self-preferencing as a "by-object" infringement based on an *intuitive* conception of EOp. The authority's legal test, moreover, does not lay down clear conditions against which the legality of the conduct was assessed. Rather, it suggests an analysis where certain factors –

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91 Similarly, *see* Colomo [2019] 532, 536. *See* further Section 3 below.

92 Colomo and Kalintiri [2020] 321, 364 speak of '"policy-driven" enforcement'.

93 The decision fault's Alphabet/Google's differential treatment of competing advertisers but does not provide guidance on how to determine which advertisers are relevant for assessment purposes (*see Navx* (ch 4 n 148), paras 222-238).

94 *See E-Kanopi* (Case 10/0081F) ADLC Decision 13-D-07 28 February 2013, paras 62-76 (no liability); *Gibmedia* (Case 15/0020M) ADLC Decision 15-D-13 9 September 2015, paras 169-173 (interim relief rejected but liability confirmed on the merits in *Gibmedia (merits)* (Case 15/0019F) Decision 19-D-26 19 December 2019, paras 343-513) ; *Amadeus* (Case 18/0048M) ADLC Decision 19-MC-01 31 January 2019, paras 155-163 (interim measures granted and confirmed on appeal in *Google v Amadeus* (Case No 1903274) Paris Court of Appeal Judgement 4 April 2019).

favourable display and positioning of Alphabet/Google's own vertical service within its general search platform infrastructure, combined with web-traffic diversion – supported the finding of abuse, in the specific context of that case.

European authorities, one should note, are not alone in sometimes prioritizing resolute over reasonable but constrained enforcement. Nor are game-mastering tactics the only upstream-oriented practices singled out for such treatment. Take Brazil, where the CADE hinted that scraping should likewise be subjected to an unstructured "by-object" test by stating that potential negative effects on incentives to innovate would be sufficient to trigger prima facie liability.[95]

There is certainly nothing inherently shocking about these incidents. In some jurisdictions, public enforcers might simply have – in the case of the EU, have been shown to display – a tendency to shape enforcement standards so as to expand the law's reach.[96] This may be especially true where negotiated procedures (that both obviate the need for a fully-fledged legal analysis and are less exposed to judicial review) are available.[97] In Japan, for example, the JFTC has clearly stated that it will double down on commitment proceedings in digital markets precisely because they 'can contribute to quick problem solving […] without establishing facts.'[98]

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So, what is the upshot? It is that, if successful enforcement is the endgame, resolute standards are the way to go. Indeed, while the reasonable approach can make for swift intervention when the "competitive process" paradigm is endorsed, rule-of-law considerations do hamper it. Whether and when resoluteness should trump

95 *See E-Commerce/Google* (ch 5 (n 16), para 144.

96 *See* Colomo (2018) chs 3-4, 6 (analyzing over 600 formal EC antitrust decisions and finding that the authority has consistently sought to define the scope of its power expansively by resorting to "by-object" legal tests).

97 ibid 288-299.

98 JFTC (2019) 9.

reasonableness, though, are questions whose answers are driven by policy (sensu stricto), not law.

Section 2. What (form(s) of) power?

Enforcement standards are vital cogs in the antitrust apparatus. But greasing them will prove somewhat futile without a clear understanding of what the instrument is meant to target in the first place. The "goal(s)" issue is fundamental in this respect. As we now see, it not only reflects a particular outlook on why we value competition and guides how we rationalize our upstream fears; it can also impact the kind of enforcement standards we might adopt to address them. There is, however, another matter in this complex equation. Actually, it is a transcendental one. For, whatever one's view on what the appropriate antitrust paradigm should be, we must not forget that the policy is, and has always been, 'a response to the universal pursuit of economic power.'[99]

Its concentration and pervasiveness in the platform economy, we saw in the introductory chapter, have been widely reported; this is partly what prompted our entire inquiry to begin with. The problem we face here, as Commissioner Vestager puts it, is that '[t]ackling power in the digital world can sometimes feel a bit like grappling with Proteus. Everything about it is constantly changing – not just the technology, but also how businesses work.'[100] Let us push this observation further.

A) The forms of (platform) power

Power 'is one of the most palpable facts of human existence.'[101] It has also long tormented sociologists and political theorists. Still, contemporary antitrust lawyers have

99 Sullivan and Grimes (2006) 3.
100 Vestager (2019f).
101 Dahl [1957] 201, 201.

rarely lost sleep over the notion's meaning. For them, it is merely the ability to raise prices above marginal costs (or to lower output below the competitive equilibrium).[102] Needless to say, this is the technical definition of "market" power, which is how mainstream economists conceive power.[103] Given the limitations of their discipline – its inability to rigorously conduct antitrust-relevant dynamic and economy-wide general equilibrium analysis – such a narrow focus is understandable. And, to be fair, the neoclassical (econometric and analytical) devices developed within this framework have served antitrust reasonably well in an era where competition between firms was predominantly price-based. What our upstream platform power plays reveal, though, is that the toolkit needs to be updated. Yet, not everything about platform power is novel and mysterious. Its relevant forms are, in fact, generally known and/or have been encountered by antitrust decision-makers in the past. Digitization has simply provided them with new breeding grounds. Let us explain.

1. Market power

To begin, there is the traditional "market prices/output control" species just mentioned above. Because of historical path dependence – aided by the rise of the "consumer welfare" paradigm – antitrust's attention has overwhelmingly been on the market power enjoyed by sellers.[104] But, as we saw in Chapter 3, monopsony – the ability to withhold purchases (to squeeze suppliers) – and bargaining power sensu stricto – the ability to extract favourable conditions from sellers (without being able to withhold purchases) – are not only well established, although under-scrutinized, in mainstream economics and antitrust practice;[105] they are also quite relevant when we examine platform

102 *See* eg Posner and Landes [1980] 937, 939; Hovenkamp (2005) 95.
103 *See* eg Perloff (2012) 364.
104 *See* Sullivan and Grimes (2006) 75.
105 Think of powerful retailers in grocery industries.

practices. Amazon's highly publicized tussles with book publishers are cases in point.

These forms of market power, moreover, can likewise be wielded by labour platforms like Uber. The challenge here is more acute. Labour market power – the employer's ability to suppress wages[106] may well be the mirror image of buyer-side product market power,[107] but antitrust has to a significant extent forfeited its protective function to labour law.[108] This means we currently do not even have the tools to measure it. Nevertheless, insofar as they can be shown to exist, the idea of refocusing antitrust towards these more marginalized forms of market power is not something that should cause a stir. Truth be told, beyond the platform context, it appears to have already gained considerable traction with decision-makers.[109] The same is not true for all remaining forms of platform power, though.

2. Relational/relative market power and its outgrowths

One of them is quintessentially *relational* or *relative* and, unlike market power, not structural or erga omnes. It is the power a platform may wield over a particular provider resulting, in extreme cases, from fortuitous circumstances surrounding their interactions. This is not the non-transitory power a platform may hold against all providers within a precisely defined relevant market – *market* power proper – which is exogenous to, and precedes the specific conditions of, the interplay between the platform and any given supplier.[110] Instead, we are talking about a purely vertical and situational form of superior bargaining power (SBP). It flows from a platform-

106 ie the ability to lower wages below the marginal revenue product (which is extra revenue the employer gets from hiring an additional worker).

107 Naidu, Posner and Weyl [2018] 536, 538.

108 Indeed, employees typically fall outside the personal scope of antitrust as they do not have the autonomy required to qualify as economic undertakings.

109 *See* Frade and Marques de Carvalho (2019).

110 I borrow from the conceptually useful distinction made by Trebilcock (1993) 93-95 between "situational" and "structural" monopolies.

provider's economic dependence on the platform which, prosaically, enables the latter to get what it wants from the former. This situation is reportedly quite pervasive in the platform economy.[111] Its supervision, however, in particular through antitrust, is likely to remain contentious. As is well known, bargaining power asymmetries have historically been a rather marginal, deeply divisive, and mostly unpopular topic of discussion.[112]

Moving on, our next two types of platform power are merely outgrowths of SBP.

First, there is "gatekeeper" (or gateway or bottleneck) power. We came across it in Chapter 3, which noted that platforms will often have the ability and incentive to "milk" their dependent providers even when they are not monopolists. As economists have shown, where a multi-sided platform deals with single-homing consumers on one side and multi-homing suppliers on the other side, the platform has little incentive to prioritize the latter's interests.[113] In such a scenario, providers must deal with that particular platform if they want to access its consumers.

Bottleneck power is nonetheless specific neither to *digital* platforms,[114] nor to *multi-sided* ones.[115] It is not even novel to antitrust decision-makers for that matter.[116] To date, though, it has only been explicitly tackled together with market power and usually in the merger policy context.[117]

The second offshoot is a variation of gatekeeper/gateway/bottleneck power,

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111 *See* Appendix D.

112 *See* Hou [2019] 39, 47.

113 Recall ch 3 (n 31). *See* also Armstrong [2006] 668, 677ff.

114 Think of newspapers or a shopping mall.

115 Think of supermarkets.

116 Gatekeeping/bottleneck power is frequently at the heart of refusal-to-deal cases. Moreover, it has been a particular concern in retailing industries (*see* eg FTC (2001) 58; BKA (2014) 12).

117 *See* eg *Kesko/Tuko* (Case IV/M784) European Commission Decision 97/277/EC [1997] OJ L110/53, paras 133-135.

which is really only different in name. It may be dubbed "infomediation" power to reflect the fact that some information platforms can effectively be gatekeepers without being legally bound to suppliers in a way recognized under private law. This is notably the case of search engines like Google Search whose relationship with content providers may be commercial in a factual and economic sense despite the absence of a binding contract.[118] Given their functional equivalence, it might be simpler to conflate gatekeeping and infomediation power into a single concept of "intermediary" power.[119]

3. Ecosystem power

Relational market power and its outgrowth are thus essentially about relationships of dependency. In the platform context, these may be further exacerbated when the platform enjoys what is denoted here as "ecosystem" power. This is the power a platform obtains when it manages to steer and ultimately lock-in consumers and/or providers into an array of (complementary) services that are connected to, and anchored by, a core platform infrastructure. Ironically perhaps, ecosystem power will often result from, or be reinforced by, an upstream platform power play. The cautionary tale of Sonos offers a good illustration of this pernicious dynamic.

In 2020, the firm accused Amazon and Alphabet/Google of coercing it to access its (allegedly) patented speaker technology with a view to making copycat speakers.[120] The move by the platforms naturally enhanced their respective ecosystem of products centred around core platform infrastructures – Amazon's online marketplace and Alphabet/Google's general search engine. The problem for Sonos, however, is that it

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118 This point was noted (somewhat sceptically) by the BKA when it invoked a rarely – though, in the US, more frequently – used procedure to make a dispositive finding of absence of infringement regarding the scrapping of news publications. *See Google/VG Media* (ch 5 n 19), paras 135-139.

119 This is what Schweitzer and others (2018) 73-75 recommend.

120 *See* Nicas and Wakabayashi (2020).

relies on Alphabet/Google's search advertising services to market its speakers; depends on Amazon's marketplace to sell them; and has even integrated both of their respective music services and digital butlers directly into its own products. To make matters worse for Sonos, its employees correspond via Alphabet/Google's emailing service, and it runs its business off Amazon's cloud-computing system.[121]

Now, despite being under-researched,[122] ecosystem power is just a form of digital conglomeracy. It can probably be explained by supply and demand side factors – respectively, economies of scope in product development a platform firm can generate by designing its core platform with modular and sharable inputs;[123] and appreciation by consumers of consumption synergies arising from the linkage of the platform's various products.[124] But again, this is not something completely alien to antitrust decision-makers. In the merger policy context, many of them have toyed with it – not without considerable backlash – under the moniker of "portfolio" power.[125] Some still do,[126] although most jurisdictions have seemingly abandoned the concept.

4. Regulatory power

Comparably to relational market power, (to a certain extent) its outgrowths, and ecosystem power, there is another form of platform power that is not (only) structural in nature. Regulatory power – the ability to set and fiddle with the rules of the within-platform game – is at the heart of some of the despotic and game-mastering tactics

121 ibid.

122 *See* Crémer, de Montjoye and Schweitzer (2019) 34.

123 Take Alphabet/Google's general search engine: the platform infrastructure is based on servers and network equipment, as well as on multiple software inputs (most notably search algorithms), which are all modular in that they are independent components interacting based on standardized interfaces. Add the data the platform collects to this mix and one obtains a situation where the firm has both the ability and incentive to expand its products (*see* Bourreau and de Streel (2019) 7-10).

124 *See* Bourreau and de Streel (2019) 10-11.

125 The idea being that power deriving from a portfolio of brands could exceed the sum of its parts. *See* OECD (2002).

126 For instance, Brazil (*see* CADE press release (2016)).

explored in Part II. It is also something any platform enjoys, which is why there is nothing inherently problematic about it, unless one is steadfastly suspicious of private governance.[127] Remember, regulatory power is pervasive in society. What's more, economists and antitrust decision-makers have, respectively, theorized (albeit insufficiently) and dealt with it for years. To stress this latter point, recall that sports association and leagues are effectively private regulators. Their restrictions on matters like player movement and eligibility have sometimes attracted the scrutiny of antitrust decision-makers. This is especially so in the EU where they are likened either to public restraints to be grappled with under free movement law,[128] or to private governance falling within the scope of antitrust.[129]

5. Informational power

Another pervasive form of platform power is "informational".[130] In reality, though, there are two components to it. One finds its source in a well-known kind of market failure. The other is more platform-specific.

a) Insider's power

The first will be dubbed "insider's" power. This is essentially the ability to exploit information asymmetries. Self-preferencing and kingmaking strategies explored in Chapter 4 illustrate how platform-providers may be affected by it. Here, however, the

127 *See* eg Teachout and Khan [2014] 37, 41ff; Nachbar [2013] 57.

128 *See* eg Case C-415/93 *Bosman* ECLI:EU:C:1995:463 [1995] ECR I-4921 (rules enabling teams to demand a transfer fee for players on an expiring contract).

129 *See* eg Case C-519/04 P *Meca-Medina and Majcen* ECLI:EU:C:2006:492 [2006] ECR I-6991 (anti-doping rules whose breach entailed a four-year ban); *ISU* (Case AT.40,208) European Commission Decision 8 December 2017 (rules hindering athletes from participating in unofficial events). In the US, such cases have been rarer because these types of rules are collectively bargained and exempted from antitrust scrutiny under the non-statutory labour exemption. One example is *Mackey v National Football League* 543 F2d 606, 609 (8th Cir 1976) (rule requiring teams acquiring players on expiring contracts to compensate their former teams). *See* Gauthier (2018) for a brief comparative analysis of competition concerns in sports governance.

130 Patterson (2017) 69ff.

source of informational power lies in a supply and demand market failure on the consumer side of the platform infrastructure. That is, consumers' inability, in many circumstances, to discern whether they are receiving high- or low-quality information;[131] and – assuming even they know better – rival platforms' lack of incentives to provide better information.[132]

Granted, the market failure is exacerbated by the opacity inherent to how platform infrastructures work. We cannot know for sure whether Google Search or Booking.com, for example, are really ranking providers according to our preferences as search engine results are determined by algorithms whose workings are beyond us.[133]

This – again – is nevertheless not a platform-only issue. As Frank Pasquale explains, '[b]lack boxes embody a paradox of the so-called information age: Data is becoming staggering in its breadth and depth, yet often the information most important to us is out of our reach, available only to insiders.'[134]

The matter is likewise not new, even for antitrust. Think of the credit rating agencies (CRAs) that still hold sway over our financial markets.[135] Their rating models have little to envy platform infrastructures when it comes to opacity.[136] Notably, CRAs – themselves multi-sided *non-digital* platforms[137] – have also long been (allegedly) breaching competition laws by exploiting information asymmetries in strikingly similar ways to our game-mastering platforms. In the mid-1990s, for

131 Patterson (2017) 80-83; Stucke and Ezrachi [2017] 70, 90ff.
132 Patterson (2017) 71-80.
133 Public disclosure of algorithms is hampered by trade secret and data protection laws. Not that it is necessarily desirable as most of us would not understand them anyway. Worse, some businesses would then probably find ways to "game" the algorithms to our detriment (*see* ACCC (2019a) 252).
134 Pasquale (2015) 191.
135 Incidentally, many have also described them as "regulators" (*see* Kerwer [2005] 453) or "gatekeepers" (*see* Darcy [2009] 605, 608-609).
136 *See* Carroll [2012] 93, 112-113.
137 ESMA (2015) para 163.

instance, a school district claimed before the US courts that Moody's – one head of the global CRA duopoly[138] – had unlawfully published a deliberately negative, unsolicited, rating of the district's bonds issue to punish it for having chosen smaller raters.[139] Plus, we now know that kingmaking by CRAs was endemic during the 2000s.[140]

Of course, regulation is how societies should deal with insider's power – CRAs are a case in point.[141] In the early-2010s, though, some commentators would have had antitrust tame it instead,[142] just as others might recommend using the policy to tackle it in platforms today.

b) Panoptic power

The second manifestation of informational power ought to be called "panoptic" power. Unlike other forms of platform power, the latter is *terra incognita* for antitrust. It was on display in our discussion of data-twinking and reflects the platform's ability to leverage to its advantage the information it invariably gathers from everyone who uses the platform infrastructure it controls. Identically to regulatory power, its source is positional. It flows from the position of the platform in the exchange space where the latter is, by definition, almost omniscient.[143] Still, there is arguably something more to panoptic power than a merely informational component. We came across it in Chapter 3 where we rationalized the consumer supremacy-oriented governance implemented by platforms like Uber as a form of economic oppression. The theory behind panoptic

138 *See* Cash (2018) 89.

139 *Jefferson County School District No R-1 v Moody's Investor's Services Inc*, 988 FSupp 1341 (DColo 1997), aff'd, 175 F3d 848 (10th Cir 1999) (complaint dismissed on First Amendment immunity).

140 Caroll [2012] 93, 103.

141 *See* Cash (2018) 20-23, chs 4-6. *See* also ch 7 below.

142 *See* Petit [2011] 587, 609-612 (discussing the superiority of antitrust), 612ff (discussing EU antitrust enforcement options).

143 Platforms do not necessarily enjoy "perfect information" as it is sometimes assumed (*see* eg Feld (2019) 40). Indeed, their view can be gamed or spoofed by those who use its platform infrastructure.

power might thus be further bolstered by appealing to philosopher-sociologist Michel Foucault. For he defined it as 'continuous individual supervision, in the form of control, punishment, and compensation, and in the form of correction, that is, the moulding and transformation of individuals in terms of certain norms.'[144]

6. Systemic power

The final form of platform power we again do know of, yet generally ignore. Let us call it "systemic" power since several platform products have been described as 'socio-economically more or less essential'.[145] Upon reflection, Google Search, Facebook, Amazon's marketplace platform, to name a few, arguably do provide services to both consumers and suppliers that are so essential that one might view them as basic infrastructures of our modern societies.[146] Why? Because their underlying economics of production are characterized by scale effects and require a certain degree of economic concentration; because they act as critical enablers of a wide range of economic but also social uses; and because many of us perceive them as basic necessities.[147] Systemic power is therefore the ability a platform has to behave relatively unencumbered because the platform infrastructure it offers is so crucial to the well-functioning of our social and economic orders that its failure would create a systemic shock that might undermine them.[148]

This form of power will be easily slotted into the antitrust thesaurus of those who share with early-20th-century progressives the fear of bigness.[149] To be clear,

144 Foucault (2001) 70.
145 Study Group (2018) 3.
146 *See* Rahman [2018] 1621.
147 ibid 1621, 1641-1644.
148 *See* similarly Frison-Roche [2015] 1, 5. *See* also Öhman and Aggarwal [2020] 0 (discussing the potentially '*catastrophic* social and economic consequences' if Facebook were to disappear).
149 *See* eg Wu (2018); Ayal [2013] 221.

though, it is not premised on corporate size.[150] Indeed, the idea of systemic power borrows from the notion of "systemic importance", which is now commonplace in banking law. It too became tied to antitrust amidst the Great Recession when so-called "Too-Big-To-Fail" institutions were marked by some for increased scrutiny.[151]

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Platform power is protean in nature, but not completely mysterious.[152] Our antitrust decision-makers and their expert-advisers are attuned to this reality.[153] To varying degrees, many of them would give *antitrust* a larger role in policing the different forms it may take.[154] The question, then, is whether the policy can, or even should, widen its radar's spectrum. As argued below, the search for optimal, reasonable, or effective antitrust enforcement will once again colour the answer.

150 For instance, Rahman [2018] 1621, 1670ff, would argue platforms like Uber and Airbnb enjoy systemic power just as Alphabet/Google, Facebook or Amazon would. Admittedly, the first two are "big" in both absolute and relative size. But the scale is of an entirely different magnitude.

151 *See* references in Orbach and Campbell Rebling [2012] 605, 653 (n 274).

152 Table 6.1 below summarizes what has just been written.

153 *See* Appendix D.

154 ibid.

Type of platform power		Source	Expression	Scope of exertion	State of the art
Market power		Market structure	Control over market price/output	Horizontal and vertical	Known
Relative/relational market power		Bargaining power asymmetry	Control over dependent partner	Vertical	Known
Gatekeeper/gateway /bottleneck/infomediary /intermediary power		Market structure + bargaining power asymmetry	Control over dependent partners	Vertical (erga omnes)	Known
Ecosystem power		Synergetic linkage between products	Mutually reinforced control over dependent consumers and partners using core platform product and connected products	Horizontal and vertical	Known
Regulatory power		Position in the exchange process + business model	Control over platform infrastructure use	Vertical	Known
Systemic power		Market structure + capital markets + societal importance	Control over economy/society	Horizontal and vertical	Known
Informational power	**Insider's power**	Market failure + opacity	Information asymmetry exploitation	Horizontal and vertical	Known
	Panoptic power	Position in the exchange process + platform infrastructure	"God" view of the platform infrastructure	Vertical	Novel

Table 6.1 *Platform power: summary table*

B) Optimal, reasonable or resolute power radar?

1. Optimal radar

Those favouring the optimal approach would readily recognize that platforms make the modern antitrust radar go haywire. Following this approach, however, the solution is not to increase the radar's range. It rather involves tweaking the *market* power antennas currently being short-circuited.

Most would surely agree that structural buyer power signals need to show up, including – and with a growing sense of urgency – in labour markets.[155] Regarding product markets, we have some tools, which are both rarely used and, by some

155 *See* eg Hovenkamp (2019); OECD (2019b).

accounts, defective.[156] With regards to labour markets, the circuits are not even in place, although there are promising new developments on this front.[157]

The foregoing notwithstanding, for those seeking optimal antitrust the more pressing issue is properly registering the seller market power of *multi-sided* platforms. Multi-sidedness (alongside data and the zero price-point so prevalent on the consumer side) does seem to render the classical "control over market prices/output" conception of market power somewhat anachronic. So much so that some economists are working hard to make the power radar more responsive to these new dynamics.[158]

The enterprise assuredly has merit.[159] Regrettably, it has also mired itself in a set of controversies that have already boiled over in courtrooms.[160] The problem is that these debates are not only apparently intractable and reputationally damaging;[161] they are likewise symptomatic of a broader implication of the approach, namely its obliviousness to (or unwillingness to consider) the potential antitrust relevance of other dimensions of economic power.

Bearing this in mind, what would our other two enforcement options entail?

2. Reasonable radar

The reasonable approach is not impervious to recommendations of optimality proponents; to the contrary. Yet, it does take issue with the uncritical assumption implicit in them that antitrust should only be about inhibiting abuses of market power

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156 For instance, Carstensen (2017) ch 3, argues that the market share threshold for concern is lower than on the seller side, especially in retailing cases. Anchustegui (2017) chs 4-5, by contrast, argues that current tools are defective because they do not consider both the upstream and downstream markets.

157 *See* Naidu, Posner and Weyl [2018] 536, 549ff.

158 *See* eg Franck and Peitz (2019). *See* also Robertson (2020) chs 8, 10.

159 Germany, for instance, has already amended its competition law to explicitly clarify the relevance of "zero-price" markets, data and network effects for antitrust purposes (*see* ss 18(2a), (3a) GWB).

160 For a comprehensive discussion, *see* Robertson (2020) ch 8.

161 Hovenkamp [2019] 101, 155 (comparing multi-sided market theory to contestable markets theory and predicting a similar fate).

in the technical economic sense. Adhering to such a postulate 'is not only to miss much in the history and development of the law, but to ignore much of its potential.'[162] At the same time, the reasonable power radar is one that is calibrated so as not to overstate nor misconstrue antitrust's abilities. Briefly looking at the issue of relational/relative market power illustrates this nicely.

As noted earlier, SBP is an unpopular topic, especially in antitrust cenacles where it is widely perceived as the policy's bastard child. The prevailing animosity towards SBP was perhaps best captured by Antonin Scalia (the late SCOTUS Justice) when he opined that its inclusion arguably 'transforms [antitrust] from a specialized mechanism for responding to […] economic power to an all-purpose remedy against run-of-the-mill business torts.'[163] This objection does have teeth; antitrust decision-makers should not be given *carte blanche* to satisfy their paternalistic or redistributive impulses. Even so, SBP clearly ought to flash on the policy's power radar, albeit at varying levels of intensity. "Consumer welfare", we have seen, can sometimes be harmed.[164] And given that protecting the "competitive process" (properly understood) means safeguarding the economic freedom and EOp of all those who participate in the production of economic value, it would be odd if antitrust did not regularly register SBP under this paradigm as well.[165] In other words, both sets of goals can be jeopardized at lower levels of economic power than market power proper.

Three difficulties then emerge. The first – interfacing antitrust with other policies – is examined in the next chapter. The second is the potential introduction of

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162 Sullivan [1977] 1214, 1222-1223.

163 *Eastman Kodak Co v Image Technical Services Inc* 504 US 451, 503 (1992) (Scalia dissenting).

164 Recall the bargaining models in ch 3. IO and evolutionary economists have also found that SBP can negatively affect innovation in specific, admittedly non-platform, settings (*see* Bougette, Budzinski and Marty [2019] 261, 272-279 (reviewing the IO literature); Féteira (2015) 264-266 (reviewing the evolutionary economics literature).

165 *See* similarly Bougette, Budzinski and Marty [2019] 261; Bakhoum (2018); Foer (2016); Drexl (2014). *See* also BRICS Centre (2019) 330.

provider-oriented outcome fairness considerations through the backdoor,[166] a risk which, to my mind, well-designed enforcement standards can mitigate. The third is the absence of robust metrics for identifying SBP.[167] Fortunately, this challenge has to a certain extent been taken up by competition agencies whose antitrust laws include provisions on SBP.[168] Economic research should further bolster their efforts.[169]

Perhaps more fundamentally, however, the reasonable approach would take seriously what was mentioned in Chapter 2, namely that competition is not only a horizontal game between substitutable players; it likewise has a vertical dimension, which, as we have seen, is on full display in the platform-to-provider context. Beyond recognition, we admittedly also need an analytical framework. Here, the value chain tool – essentially a mapping out of different industries and inter-firm relations running through a chain to identify the power dynamics within it[170] – seems to be a worthy candidate. It could at least complement traditional antitrust analysis, which only looks at markets comprised of substitutes.[171] Notably, it already has gained significant endorsements.[172]

A reasonable power radar, therefore, is a coherent one. It is both in tune with the (goal(s), principles and requirements of the) antitrust system of which it is a part, and calibrated with the assistance of formal instruments.

So, what of our other forms of platform power? Given their positional nature, regulatory and panoptic power should not, as such, trigger antitrust alarm bells. The

166 This is arguably the case in Germany and Japan whose antitrust laws include specific SBP provisions that are ostensibly about protecting competition as such (*see* ICN (2007) 7; (2008) 14) but also display a concern for outcome fairness (*see* similarly Wagner-von Papp (2018)).

167 BRICS Centre (2019) 333, also recognizes this as a challenge.

168 For a useful overview, *see* BRICS Centre (2019) 333-337.

169 *See* Bougette, Budzinski and Marty [2019] 261, 272ff.

170 *See* Sobel-Read [2014] 364.

171 The endeavour could only be complementary since 'market definition is, at least for now, too big to fail.' (Robertson (2020) 317)

172 *See* BRICS Centre (2019) 343ff; Furman and others (2019) 114. *See* also Bougette, Budzinski and Marty [2019] 261, 275.

contrary would render the radar useless – any platform enjoys them – and undermine the idea that the policy is (or should be) business-model agnostic.[173] Where societies display a particular distrust for these forms of power, specific regulation should be enacted.[174] Likewise for insider's and systemic power, albeit for slightly different reasons. The former because it flows from a *market failure*;[175] the latter since it is not only economic, but is also social in nature. Historically, public utility-style controls have been deployed to tame it.[176] Furthermore, insofar as it might misleadingly suggest a concern for corporate size, let us recall that "bigness" is not, and never has been, a stated worry of antitrust even if it has undoubtedly shaped the policy's development in certain jurisdictions.[177] Finally, ecosystem power creates a relatively tricky situation. As explained earlier, its vertical aspects might warrant detection. But if one accepts the very idea of product ecosystems, it would be incoherent not to recognize that there can be *horizontal* competition between different ecosystems, which should then be integrated in the analysis.[178]

While attuned to antitrust's potential, the reasonable approach, hence, clearly does inhibit frictionless enforcement as it requires a profound, maybe lengthy, certainly controversial, and ultimately uncertain introspection. Urgency may thus push us to be more resolute.

3. Resolute radar

Resoluteness, one will recall from our discussion on enforcement standards, is about achieving a successful outcome. As noted earlier, policy-makers (and their advisers)

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173 *See* Lamadrid de Pablo [2014] 5, 16.

174 *See* further ch 7.

175 Similarly, *see* Khan [2018] 325, 329-331, 333.

176 *See* Rahman [2018] 1621; Feld (2019) 54ff. *See* also UNCTAD (2019a) 11, (2019b) 140.

177 This is particularly the case in the US where the fear of size catalyzed the birth of antitrust and has always remained alive 'whether as a defined element, a narrative, or a lingering shadow of the past.' (Orbach and Cambell Rebling [2012] 605, 655)

178 *See* Crane [2019] 412.

are generally aware of platform power's protean nature. Some of them are also suggesting that the spectrum of antitrust's radar should be broadened,[179] although most seem to consider superfluous any serious conceptual or methodological debate regarding what these adjustments would entail.

Many policy-makers and experts would, for example, have antitrust sensitized to SBP, its offshoots and/or ecosystem power.[180] All (but one), however, appear oblivious to the fact that these are inherently vertical, usually non-structural, forms of economic power.[181] Yet, we just saw that our current toolbox can only imperfectly capture the latter and that a conversation on vertical competition is thus needed.

In Europe, Commissioner Vestager has similarly stated that the competition authority she oversees is in the business of '[c]ontrolling the regulatory power of platforms'.[182] Unbeknownst to her, it seems, is the aforementioned paradox such supervision entails.

And in the "merits" case of *Gibmedia*, the ADLC even held that quasi-monopoly status, when combined with unrelenting attractiveness and regulatory power, creates a '*very* special responsibility'[183] platforms must be wary of. This, though, is as close as one can get to inviting (without affirming) the baseless possibility of no-fault antitrust liability.

Crucially, there is little in the way of hardwiring resoluteness into the antitrust radar. One option is to 'gerrymander the relevant market'[184] by artificially narrowing it down so as to cross whatever market power threshold is legally mandated for

179 *See* Appendix D
180 ibid.
181 The exception being BRICS Centre (2019) ch 4.
182 Vestager (2019e).
183 *Gibmedia (merits)* (n 94) para 342 *juncto* 324-331 (emphasis added).
184 *Little Rock Cardiology Clinic PA v Baptist Health* 591 F3d 591, 599 (8th Cir 2009).

intervention. This is an old trick enforcers have probably sometimes used to register SBP.[185] It could also be deployed with ecosystem power in mind (which is what several reports effectively suggest).[186] In fact, one could argue that the EU *Google Android* decision foreshadows this.[187] For once a market for *licensable* smart mobile OS was deemed to exist, it almost inevitably followed that Alphabet/Google would be found to be a (quasi-) monopolist for any product directly tied to the core Android "ecosystem" product (in this case app stores).[188]

Another effective avenue is to forego market definition altogether, a practice common in certain jurisdictions,[189] although excluded in others.[190] Advocated by some scholars for years,[191] this approach has gained increased salience in the platform context where experts,[192] policy-makers,[193] but also courts[194] have put their weight behind it. Naturally, if combined with resolute enforcement standards, there would be very little in the way of intervention.

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In sum, striving for optimality means updating the power radar by merely tweaking its antennas to make it more responsive to *market* power. Being reasonable, by contrast, counsels a possibly lengthy and uncertain redesign of the radar's transmitter to enable the reflection of *other* power signals. Still, given the sense of urgency, some may favour

185 *See* eg Case C-22/78 *Hugin* ECLI:EU:C:1979:138 [1979] ECR 1869, paras 5-10 (supplier of cash registers found dominant on a market for spare parts of its own products on which independent repairers depended on). For a similar reading, *see* Vogel [1998] 4, 5.
186 *See* eg Crémer, de Montjoye and Schweitzer (2019) 48.
187 *Google Android* (Introductory ch n 41) paras 218-322.
188 For the economist who sees market definition as an agnostic analytical tool, the EC's reasoning is flawed because it ignores the horizontal competition exerted by Apple (*see* Marty and Pillot (2018)).
189 The US is a prime example (provided there is evidence of actual harm).
190 European jurisdictions are a notable example.
191 *See* notably Kaplow [2010] 438.
192 *See* eg Crémer, de Montjoye and Schweitzer (2019) 46.
193 *See* eg OECD (2018) 13.
194 *See* eg *Streetmap* (ch 4 n 228) [42].

a more resolute approach which fast-tracks the process. This can be done if one accepts the idea of placing policy (sensus stricto) before law. That choice, though, is profoundly ideological and political.[195]

Section 3. What (sort of) remedies?

Calibrating antitrust enforcement standards and its power radar to address the problem of upstream platform power plays raises difficult questions which are by no means trivial. Victims (and, to a certain extent, their abusers), however, will probably have their eyes on a prima facie more practical matter: remedies.

Decision-makers are often criticized for under-appreciating this aspect of the antitrust machinery.[196] The landmark *Google Shopping* decision in Europe definitely makes for a particularly relevant cautionary tale. In 2019 – that is, ten years after proceedings were initiated; five years on from a mooted settlement which would have entailed far-reaching remedies deemed satisfactory at the time to all but private complainants; and two years after a final decision was adopted – the EC recognized that the solution it ultimately chose was proving ineffective.[197]

The challenge here is to reconcile the imperative of responsible prosecutorial practice – ie having a clear and convincing remedial strategy before making a final decision[198] – with the realities of the platform economy. As the EU's antitrust enforcer-in-chief observed, 'digital markets change quickly. So by the time we step in, we may find that it's not easy to fix the damage that's been done.'[199] Let us look further.

195 *See* similarly van Dijck, Nieborg and Poell [2019] 0, 2.
196 *See* eg Kovacic [1999] 1285, 1286.
197 *See* Sterling (2019). At the time of writing, Alphabet/Google is still testing new approaches to comply with the decision.
198 Kovacic [1999] 1285, 1310.
199 Vestager (2019b).

A) The remedial toolkit

At a general level, suggesting that our upstream worries may leave antitrust impotent seems disingenuous. From the simple cease-and-desist obligation (possibly reinforced by fencing in and/or flanking measures) to terminate and/or prevent unlawful behaviour; to (exemplary) damage or disgorgement orders to compensate victims and sanction offenders; to more far-reaching, forward-looking, behavioural and structural measures to restore competition; decision-makers have at their disposal a highly versatile, multipurpose, remedial toolkit which can be implemented through a variety of (adjudicatory and non-adjudicatory) instruments.[200] In a state of emergency, one could therefore envision throwing the proverbial "kitchen sink" at the identified competition problem. This is certainly what some policy-makers (and their advisers) seem to have in mind when it comes to platforms (generally) and their upstream exertions (in particular). Sweeping proactive remedies are on the table.[201] And a burgeoning consensus appears to be that (to borrow again from Commissioner Vestager):

> Because in today's digital markets, competition can be fragile […] we need to look for imaginative solutions. We need to accept that just fining someone, or ordering them to stop what they're doing, may not be enough to restore competition. And we need to be willing to tell companies, not just to stop breaking the law, but to take positive action to recreate a competitive market.[202]

Such talk comes with its share of practical difficulties. Take data-twinking, for instance. One avenue suggested by some would be to give providers (say, sellers on Amazon's marketplace) access to sensitive data on interactions taking place on the platform infrastructure to level the playing field with the platform should it decide to

200 *See* generally Lianos (2013b) 376ff; Melamed [2009] 359. *See* also Ritter (2016).
201 *See* Appendix E.
202 Vestager (2019f). *See* also Madero Villarejo (2019) 5.

enter their niches.[203] Yet, beyond the question of whether this would amount to sanctioning the orchestration of an otherwise illegal cartel,[204] implementing such a remedy might be hindered by data protection rules.[205] Another, much more drastic, route would be to require the platform's unbundling.[206] Assuming it was even politically palatable,[207] here the platform context compounds well-known acute upfront practical obstacles.[208] History, moreover, suggests that structural separation needs to be combined with often very prescriptive and difficult-to-administer behavioural measures to be successful, making this path all the more challenging.[209] Hence, a milder remedy like firewalling could be conjured whereby the platform would be prohibited from using data it gleans from its platform infrastructure to inform its strategic decisions as a player.[210] Again, pitfalls abound.[211] Depending on which enforcer one asks, some will even reply: 'firewalls are virtually impossible to monitor.'[212]

Trusting that decision-makers will be creative enough to find practical workarounds, something else, though, should intrigue us. Indeed, what the emerging consensus entails is a functional inversion within the standard antitrust enforcement model itself, namely the displacement of competition law as a regulat*ive* instrument, by competition law-as-regulat*ion*.

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203 *See* eg Graef [2019] 448, 485.

204 For this argument, *see* Schweitzer and others (2018) 115. On the potential incoherence of an antitrust duty to share information under unilateral conduct rules and the resulting invitation to collude prohibited by coordinated conduct rules, *see* Di Porto (2015) 325ff.

205 Kathuria and Globocnik [2020] 0.

206 *See* Khan [2019] 973 (though she views antitrust as inferior to regulation).

207 *See* Lynch (2017) on whether platforms like Amazon might be 'too powerful to break up'.

208 *See* eg CMA (2020b) Appendix ZA, paras 97ff (discussing separation options to address Alphabet/Google's control in adtech markets).

209 *See* Shelanski and Sidak [2001] 1, 36, 80-82.

210 *See* Schweitzer and others (2018) 115.

211 A firewall's effectiveness depends on whether the firm (and its staff) behave(s), which in turn depends on whether enforcers can identify and plug loopholes.

212 EC (2011) 6. Similarly, *see* BKA (2017) para 87. cf CMA (2018) paras 7.24-7.26, but see para 3.52)

Proactive intervention, to be sure, has always been a (sensitive) reality,[213] especially in some jurisdictions.[214] But how far can, and should, we go in our attempts to redress upstream platform power plays? Differently put, can – and, if so, should – our antitrust decision-makers imitate central bankers and declare that they are 'ready to do whatever it takes'?[215] The answer depends once more on how one chooses to approach the question.

B) Optimal, reasonable or resolute remedies?

1. Optimal remedies

Remedies are an under-theorized component of the antitrust apparatus.[216] Decision-makers thereby enjoy considerable discretion to fashion them. And those questing for optimal solutions would probably borrow from decision theory.[217] Accordingly, they would need to be convinced that

> [T]he expected [benefits of the contemplated remedy] will offset any production cost increases or losses in consumer-side network externalities; that the net gain from such [benefits] will not entail offsetting costs in the form of inefficiently reduced innovation incentives; and that the remaining net gains can then not be achieved at a lower cost through an alternative remedial plan.[218]

Yet, this cannot be done with any sense of accuracy[219] and simply invites antitrust decision-makers to 'resort to their own tried and tested version of peering into

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213 For categorical rejections, *see* Lianos (2013b) 435; Werden [2009] 65, 75-78. For more nuanced accounts *see* Maggiolino (2015); Ayal (2015); Dunne (2015).

214 In the US, the SCOTUS has denounced it (*see Verizon Communications Inc v Law Offices of Curtis V Trinko LLP* 540 US 398, 415 (2004)). In the EU, proactive antitrust has been much more prevalent, especially in regulated industries (*see* Colomo [2012] 261).

215 Draghi (2012).

216 Weber Waller [2009] 11, 11. For an insightful attempt at a theory, *see* Lianos (2013b).

217 *See* eg *Fleet Wholesale Supply Co v Remington Arms Co* 846 F2d 1095, 1097 (7th Cir 1988) ('The court should try to minimize the error costs, the sum of the costs of erroneously granting an injunction (should it turn out that none is warranted) and of denying an injunction (should the plaintiff prevail in the end).')

218 Shelanski and Sidak [2001] 1, 39.

219 *See Fleet Wholesale* (n 218) 1097 ('That inquiry requires the court to consider many factors that cannot be measured precisely').

a crystal ball.'[220] Striving for optimality thus paves the way for a kind of (presumably conservative) "discretionary remedialism"[221] that contrasts sharply with our other two enforcement routes. Let us explain how.

2. Reasonable remedies

The reasonable approach, we have seen, is not oblivious to cost concerns animating those favouring optimal solutions. But its operation is guided primarily by the fact that antitrust is a system of law, which, itself, is part of a broader legal order whose overall coherence is paramount. What does this mean in practice for our discussion on upstream platform power plays?

- Reasonable remedial discretion is invariably bounded

The ethos of the reasonable approach is aptly captured by an oft-cited US ruling where the judge opined that society, having entrusted antitrust decision-makers with powers they have in no other branch of law, expects such authority will not be ruthlessly exercised to achieve what is sometimes beyond the policy's reach.[222]

Reasonable remedial discretion must ipso facto necessarily hit a conceptual boundary, one defined by the nature of the antitrust proceedings.[223] On the one hand, private enforcers should only be able to obtain relief that is correlatively connected to the wrong(s) they have suffered, reflecting the need for corrective justice.[224] On the other hand, public enforcers ought to be granted whatever remedy follows from the trade-off device used by the decision-makers – in many jurisdictions, this will be (some

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220 *Deutsche Telekom AG* (n 6) 187.

221 ie 'discretion to award the "appropriate" or optimal remedy in the circumstances of each individual case rather than being limited to specific (perhaps historically determined) remedies for each category of causative events.' (Lianos (2013b) 380)

222 *United States v United Shoe Mach Corp* 110 FSupp 295, 348 (DMass 1953).

223 On the 'normative impossibility of discretionary remedialism' in antitrust, *see* Lianos (2013b) 380ff.

224 Lianos (2013b) 382-398. *See* also Areeda and Hovenkamp (1978) para 657a.

version of) the proportionality principle. Why? Because their action is guided by the greater good and invariably affects an assortment of (sometimes legally protected) interests.

These precepts are well established in numerous antitrust systems[225] and, under this approach, should not be waived merely because of a perceived sense of urgency.[226]

- Reasonable remedies fit the liability theory

From the above-outlined precepts, it also follows that a reasonable remedy must map onto the theory of harm giving rise to liability.[227] This is equally well recognized in several jurisdictions[228] where, in the context of public enforcement, it likewise reflects the imperative for legal certainty.[229] The constraint has key implications for our discussion.

Consider the *Navx* decision discussed earlier, which dealt with the issue of kingmaking. There, the ADLC did not just order the re-establishment of Navx's suspended account.[230] It also enjoined Alphabet/Google to treat all advertisers using its general search platform infrastructure (via the formerly named AdWords service) in an objective, transparent and non-discriminatory manner. Crucially, the authority recognized this would require:

— (i) defining unambiguous terms of service;

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225 *See* Lianos (2013b); Hjelmeng [2013] 1007, 1027.

226 cf BRICS Centre (2019) 425-426.

227 *See* Lianos (2013b) 433ff; Colomo [2012] 261, 277; Barnett [2009] 31, 36; Areeda [1976] 1127, 1127. But cf Helllstrom, Maier-Rigaud and Wenzel Bulst [2009] 43, 58ff.

228 *See* Joined cases C-6 and 7/73 *ICI and Commercial Solvents* ECLI:EU:C:1974:18 [1974] ECR 223, para 45 (remedies 'must be applied in relation to the infringement which has been established').

229 *See* Case C-279/95 P *Langnese-Iglo* ECLI:EU:C:1998:447 [1998] ECR I-5609, paras 74, 78 (upholding the GC's quashing of an EC remedy that had not been 'applied according to the nature of the infringement found' and connecting this constraint to the principle of legal certainty).

230 *Navx* (ch 4 n 148) Art 4.

— (ii) clearly informing – where appropriate with sufficient notice – advertisers of the existence of these rules and of their subsequent modifications;

— (iii) establishing an objective and transparent control and suspension procedure; and

— (iv) ensuring the non-discriminatory application of these rules and procedures.[231]

The question, though is: does the remedy "fit" the liability theory? For one, it should dispel any lingering doubts as to whether "consumer welfare" (however understood) was at stake – such a scheme only makes sense if one intends to restore EOp between advertisers. For another, this is a highly proactive remedy the type of which – under EU competition law at least – is seldom administered for products not considered essential facilities.[232] But, as noted in Section 1, the agency never meant to demonstrate that Alphabet/Google's platform was "indispensable" to advertisers. Ergo, one may doubt the reasonableness of such a scheme.[233]

- Reasonable remedies are business model agnostic

A second corollary of bounded remedial discretion, which also finds anchorage in multiple jurisdictions, is the principle that antitrust 'does not give [decision-makers] carte blanche to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.'[234] For the public enforcer, this reflects the need to consider the defendant's legally protected interests, in particular its

231 ibid para 248 and Arts 1-3.

232 Recall Colomo [2019] 532.

233 Ditto for the ADLC decisions in *Gibmedia (merits)* (n 94) and *Amadeus* (n 94), both of which draw from, and complement, the remedial scheme devised in *Navx.* This is not to say it should never be ordered. The point is only to substantiate what was argued in Section 1: if one values reasonableness, then the liability test should include an "indispensability" requirement where proactive remedies are envisioned. cf Frison-Roche (2015) (favouring regulation).

234 *Trinko* (n 214) 415-16. *See* also *Google/VG Media* (ch 5 n 19), para 197.

economic freedoms and property rights, which 'must remain the rule'.[235] Again, the limitation has considerable ramifications for our upstream platform power plays.

Recall the issue of "Sherlocking" explored in Chapter 5. Victims (say, app developers) who fear the "expropriation" of their ideas by app store operators (like Apple or Alphabet/Google) would probably lobby decision-makers for some form of separation regime and/or line-of-business restrictions. However, this would effectively entail a targeted ban on an otherwise usually legal business move: organic vertical integration.[236] Beyond damages and (for public enforcers) disgorgement,[237] it is difficult to see what a reasonable *antitrust* solution to *copying what is in the public domain* would be.

As the BKA found in its *VG Media* decision, redressing news "scraping" presents a similar challenge. Unless publishers have an (IP) entitlement to claim compensation for their content, it is hard to rationalize why the reasonable *antitrus*t remedy should involve decision-makers engaging in the complex exercise of creating one.[238] Reasonableness, here, would probably rather mean capping the amount a powerful platform is allowed to scrape.[239] This may be an impossible task,[240] which brings me to the next point.

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235 Case T-24/90 *Automec II* ECLI:EU:T:1992:97 [1992] ECR II-2223, para 51.

236 *See* eg *Filtrona v Tabacalera* (Case IV/32,426) European Commission Decision 26 April 1989. The press release of this unpublished decision states that 'a company's production of its own requirements is not in itself an abnormal act of competition.' (EC press release (IP/89/330)

237 On disgorgement, *see* Elhauge [2009] 79 (arguing that it constitutes an attractive alternative to traditional far-reaching remedies that may prove ineffective or inefficient, especially in fast-moving markets).

238 *See Google/VG Media* (ch 5 n 19), paras 195-200, 211 ('an obligation to pay a fee or to display a snippet length subject to a fee would only be conceivable under antitrust law if Google were subject to an obligation to enter into a contract which obliged the company to acquire a licence' (para 211)) (free translation). Similarly, *see* ACCC (2019a) 253, rejecting the creation of a 'new bespoke access regime' though mainly for practical reasons.

239 *See* CMA (2020b) Appendix S, para 51; ACCC (2019a) 231 (implicitly). cf *Google/VG Media* (ch 5 n 19) para 207 (rejecting this remedy).

240 *See* ACCC (2019a) 231 ('It is not clear […] that an optimum or fair snippet length can necessarily be determined').

- Reasonable proactive remedies cannot necessarily be ordered

Given the aforementioned constraints, proactive yet reasonable *antitrust* remedies to redress upstream platform power plays will not always be available. Take the "App Store tax" Apple levies on app developers but not to itself when it offers competing apps (say, Apple Music). If the liability theory is framed as an EOp issue, regulating the tax (ie setting the commission level) is out of the question. Antitrust would otherwise be misused to achieve an objective – stakes fairness – that is alien to this paradigm. However, the most intuitive solution here – a non-discrimination obligation[241] – would either be pointless or disproportionate. Pointless because requiring the platform to tax its own apps amounts to mandating an internal transfer; disproportionate because prohibiting the levy means outlawing the business model. Breaking up the platform would then arguably be the most effective and appropriate course of action – at least in the context of public enforcement.[242] Doing so would restore EOp and serve as a prophylactic on like-effect practices. But it would also jeopardize much of the firm's social and economic value. This consequence cannot be ignored, which leads us to a final observation.

- Status quo-altering reasonable remedies should be legitimate

Far-reaching behavioural and structural solutions will often establish a new status quo, affecting a variety of interests other than those of the parties to a dispute and those immediately adjacent to it. When ordered by the antitrust decision-maker, competition law stretches beyond its core regulative function to take on a regulatory role. Cost

241 *See* for this suggestion JFTC (2019) 68.

242 As noted by Areeda and Hovenkamp (1978) para 653h, it would generally be unwise for compelled breakups to be ordered at the behest of private enforcers because such remedies will generally affect interests extending beyond those immediately involved in the litigation.

considerations notwithstanding, an issue of input legitimacy thereby arises.[243] Unlike regulators who, in their rule-making (and sometimes also adjudicative) duties, routinely deal with diverse and frequently conflicting sector-wide interests, antitrust decision-makers usually see themselves as adjudicators of disputes whose resolution will produce confined effects. Where the envisioned remedy is proactive and liable to establish a new equilibrium, antitrust should, accordingly, borrow from regulation the legitimacy-building mechanisms the latter should be deploying to ensure all potentially affected interests are properly accounted for.[244]

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Reasonableness undeniably does impede – significantly in some respects – our antitrust decision-makers' ability to tackle upstream platform abuses. This reality, though, does not mean intervention should not even be contemplated.[245] As Douglas Melamed puts it, '[t]he law wisely does not refrain from prosecuting murder cases just because it cannot resurrect the corpse.'[246] Enforcement is not always capable of restoring competition, but it may have a hand in preventing and deterring bad behaviour while enabling (some) follow-on compensation for victims. Nevertheless, there is no denying that antitrust's immediate potency will sometimes be quite limited as a result, in particular where interim relief is sought.[247] Faith in the policy's output legitimacy might thus be in jeopardy. With so much at stake, can, and should, we ramp up our resolve?

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243 "Input" (or "normative" or "process") legitimacy relates to how decisions are made and is about whether decisions reflect the 'authentic preferences' of those they affect (Scharpf [1997] 18, 19). By contrast, "output" (or "outcome") legitimacy pertains to the consequences of decisions and is about whether the latter are subjectively perceived as achieving their objectives (*see* Weiler [2012] 825, 826-828).

244 *See* Lianos (2016). I write "should" because regulators arguably do not always put their best efforts into engaging with stakeholders (*see* CMA (2020a) paras 1.33, 7.11).

245 cf Barnett [2009] 31, 33; Shelanski and Sidak [2001] 1, 1-2.

246 Melamed [2009] 366.

247 *See* eg Case T-184/01 R *IMS Health* ECLI:EU:T:2001:200 [2001] ECR II-2349, para 25 (suggesting that proactive interim remedies which would alter the status quo are likely inappropriate).

3. Resolute remedies

A recurring theme in our discussion so far has been that platforms – their upstream abuses in particular – and the prevailing sense of urgency with which these problems should be handled, may require a more resolute approach to enforcement. Now, some policy-makers (and their advisers) would resort to other policy levers rather than push antitrust down the path of remedial resoluteness.[248] Yet, those who favour the latter option can find solace in the fact that it can be implemented, sometimes with surprising ease.

The earlier-mentioned *Navx* decision and its progeny are cases in point, although maybe a favourable institutional background (significantly) contributed to the ADLC's success there. It does indeed seem plausible that jurisdictions more reliant on private enforcement will be more wary of preserving antitrust's coherence than of achieving a desired policy outcome.[249] A pattern of curial deference might, likewise, feed into remedial resoluteness. In other words, had *Navx* and co. been litigated elsewhere, remedies may not have been as far-reaching; chances are they would not have across the Atlantic if the landmark *Microsoft* precedent is anything to go by.[250] Even so, remedial resoluteness can also be subtly deployed.

Consider the EC's handling of Alphabet/Google in its *Google Shopping* ruling. Having found the platform's self-preferencing to be unlawful, the authority ordered it to cease-and-desist and thereby restore EOp within Google Search between its own comparison-shopping service and those of rivals. Why is this a marker of resolve? – cease-and-desist, after all, epitomizes conventional, reactive, antitrust. The answer lies

248 *See* Appendices A, E.

249 *See* similarly Colomo (2018) 337.

250 *United States v Microsoft Corp* 253 F3d 34, 101-103 (DC Cir 2001) (lambasting the District Court's laconic reasoning and procedural shortcutting).

in what the order implied. To comply, Alphabet/Google *necessarily* has to tinker with the platform infrastructure – either by changing how search results are ranked or how they are displayed – or, if technically infeasible, to suggest a divestiture. So, while formally reactive in nature, the remedy invariably entails (unspecified) proactive duties. More subtly still, the EC appears to have relied on the formally reactive nature of the envisioned remedy to partly justify the resolute legal test against which Alphabet/Google's behaviour was assessed. How so? Well, if one accepts the premise that, under current EU law, proactive enforcement against a monopolist is only possible where the latter is "indispensable" to its trading partners,[251] then the authority should have established this. Yet, the decision explicitly refutes the requirement in part because the solution it was considering merely involved a cease-and-desist obligation.[252] In brief, resolute decision-makers can sometimes "kill two birds with one stone". That is, evade the critique of unreasonable remedial discretion while altering the expected standards of intervention by formally covering proactive enforcement in its more traditional reactive attire.[253]

Resoluteness can even lead to "hybridized" antitrust.[254] In some jurisdictions, public enforcers will, for instance, be able to leverage the availability of non-adjudicatory instruments to potentially achieve more than they otherwise could. Recall the EU *Google Shopping* case. Initially, proceedings were engaged under a negotiated instrument. And, at the time, some observers opined that the concessions the EC had obtained from Alphabet/Google exceeded what it would have been able to achieve in a traditional adjudicatory setting.[255]

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251 Recall (n 89).
252 *Google Search (Shopping)* (ch 4 n 72) para 651.
253 *See* Colomo [2019] 532.
254 Dunne (2015) ch 5 discusses the full scope of hybridisation.
255 *See* eg Lamadrid de Pablo (2013); O'Donoghue and Padilla (2013) 898.

Another example is the CMA's reliance on market investigations – a feature in only a handful of competition laws, including the UK – to scrutinize how Facebook and Alphabet/Google treat advertisers and publishers.[256] Although the authority ultimately did favour regulation, the door on antitrust enforcement was kept open, paving the way for far-reaching proactive remedies that may have little to do with competition.[257] Market investigations are particularly appealing since they enable redress even where firms are not misbehaving but the market is simply found to be failing.[258] That competition agencies in other jurisdictions might begin lobbying their respective governments for such a tool would therefore not be surprising. In fact, the EC is currently doing just this, in particular to address upstream platform power plays that are currently beyond the reach of antitrust rules because they really touch upon outcome fairness considerations.[259]

Finally, public enforcers can always play the bluffing game: launch proceedings against powerful platforms and waive the threat of maximum remedies as a bargaining chip. Success is admittedly far from guaranteed. Still, one should not discount this enforcement strategy. Amazon's brief stint in the doghouse of the German and Austrian agencies is a case in point.[260] In 2019, the two authorities teamed up to investigate allegations that the platform's business terms towards Austrian and German merchants were abusive.[261] Within eight months, both probes were closed without the adoption of formal commitment or infringement decisions after Amazon volunteered to modify the

256 CMA (2020b) ch 5.
257 ibid chs 9-10.
258 Enterprise Act 2002, s131(2)(a).
259 *See* EC Ref.Ares(2020)2877634.
260 *See Amazon* (Case B2-88/18) BKA Case summary 17 July 2019; *Amazon* BWB Case summary 17 July 2019.
261 Technically, this was not a "joint" investigation. Rather, both agencies cooperated closely to investigate what can only be described as claims of oppressive and discriminatory terms.

contentious terms. Notably, concessions were obtained sans clear liability theory[262] or detailed appraisal of facts.[263] Perhaps most practically significant, their scope is global (rather than national). Here, the line between reasonable enforcement to create a "policeman at the elbow effect"[264] and resolute "regulation by the stock price" to potentially further non-antitrust objectives can become blurred. The issue will morph into something more contentious if countries begin bolstering their antitrust apparatuses with public announcement mechanisms that would empower enforcers to effectively name-and-shame firms without the need for formal work.[265]

Of course, that tightening our resolve is a viable option to redress upstream concerns is not inherently remarkable. Some antitrust decision-makers (EU ones in particular) can presumably be shown to have consistently displayed resoluteness when faced with exceptional market circumstances or to support other policy levers.[266] Similarly, non-adjudicatory instruments have a proven track record of success, despite being routinely criticized for bypassing reasonable enforcement constraints.[267]

What is surprising, though, is the emerging consensus that remedial resoluteness should become the norm in digital markets and that existing (procedural) instruments should be reinforced. Again, if this is the way forward, we must accept that antitrust will be more policy (sensus stricto) than law.

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262 For instance, the BWB took issue with Amazon's consumer-centric refund policy that only left merchants three days to contest a consumer's potentially abusive refund claim. However, while acknowledging that Amazon's pro-consumer policy should be welcomed, the authority does not substantiate why the platform has an antitrust duty to give merchants thirty days to appeal beyond stating the obvious: merchants might otherwise be liable for potentially unjustified costs (*see Amazon* BWB Case summary 17 July 2019, paras 70-78).

263 The case summaries in both cases refer to merchant complaints and Amazon's responses to them. They do not, though, contain any findings of facts.

264 The expression is from Wu (2019).

265 The CMA (2019b) 17-18, suggested this and explicitly recognizes it would need protection from defamation liability. Similarly, the French Senate called on the State to target the stock price of super-platforms (*see* French Senate (2019) 30).

266 *See* Colomo (2018).

267 *See* ibid 287-299; Dunne (2015) 97-119, 279-294.

Concluding reflections

Upstream platform power plays present a particularly tricky conundrum for antitrust decision-makers. On the one hand, an emerging consensus has it that enforcement is urgently required. Yet, on the other hand, operating the antitrust machinery has always involved a series of difficult choices – what (kind of) standards should be used? What (form(s) of) power should be tamed? What (sort of) remedies should be imposed? – that are now exacerbated by the problems unfolding today.

Ultimately, the question really boils down to whether our antitrust agencies and courts should borrow a page from the powerful platforms' playbook which would have them "move fast and break things"; or whether they should adopt a less disruptive, but also less effective approach. This, we have seen, is a practical, yet likewise profoundly cultural, political and ideological quandary, which actually reflects the dilemma of liberal democracy itself. That is, how do we prevent the bounds of illegitimate private power from being trespassed without exceeding the limits of legitimate public power?[268]

Antitrust is not, as some would have it, merely 'a tool in the arsenal of economic regulation rather than a law.'[269] And societies that endowed themselves with such provisions will have probably also 'made sure that impartiality and the rule of law were deeply ingrained in the way [they] work.'[270] This is what fundamentally drives a reasonable approach to antitrust enforcement, which, accordingly, does 'not allow itself to be influenced so much by current thinking ('Zeitgeist') or ephemeral trends.'[271] Here, the practical relevance of choosing between available antitrust paradigms – "consumer

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268 Amato (1997) 3.
269 Massarotto (2019) 210.
270 Vestager (2019c)
271 Case C-23/14 *Post Danmark II* ECLI:EU:C:2015:343 [2015] electronic Reports of Cases, Opinion of AG Kokott, para 4.

welfare" or "competitive process" – becomes apparent. From Part II, we understand that our upstream worries can be rationalized as potential competition problems under either approach. We see now that when directed towards the protection of competition as such, antitrust can do more. Adopting rule-based liability tests is more readily justifiable; broadening antitrust's power radar can more easily be defended; and mandating proactive remedies may be more rigorously vindicated. Nevertheless, reasonableness does impose significant constraints on antitrust decision-makers. These inevitably affect the policy's ability to deal swiftly with competition problems and redress those that also (mainly) generate concerns unrelated to competition. Still, this is not (or at least should not be deemed) picayune, diversionary, rigoristic and/or inconvenient.

Alternative enforcement approaches do exist. But the practical feasibility and normative desirability of one of them – optimal enforcement – appears somewhat doubtful. The other – resolute enforcement – by contrast, is possible, perhaps even (more) likely in systems heavily reliant on public enforcers and/or where decision-makers concurrently hold antitrust and regulatory duties.[272] Compellingly, this approach does make competition law a more powerful and effective tool to alleviate our upstream anxieties. There is a price, though: antitrust, partly severed of its legal essence. That said, judging which enforcement approach should be (dis)favoured might also be informed by one's understanding of how market supervision ought to be executed. This is what will occupy us from here on out.

[272] *See* Dunne (2015) 86, 266ff. Interestingly, the current EU commissioner for competition is also responsible for digital policy development.

CHAPTER 7. ANTITRUST'S INTERPLAYS

Introduction

Antitrust, we just saw, is a powerful and flexible tool whose ability to effectively deal with upstream platform power plays will vary according to the chosen enforcement approach. Yet, so far, our focus has been squarely on the policy's internal machinery. In this final chapter, the blinders are off. Antitrust, we must not forget, is merely one of several potentially relevant levers of public action.[1]

Despite mounting (anecdotal) evidence of upstream-oriented misconduct, some will naturally question whether intervention is needed at all. For one, the State might be an inferior problem-solver to the market. For another, maybe all things digital enhance the curative virtues of markets. The Facebooks of today, some say, could be toppled just as easily as they disrupted the MySpaces of yesterday, especially if blockchain eventually lives up to its hype.[2] Distributed ledger technology, we are told, could extinguish information asymmetries that breed game-mastering schemes such as those discussed in Chapter 4.[3] So too might it cure the coordination challenges that otherwise lead network effects to foster market power.[4]

Although powerful arguments can be levelled against this pro-market/anti-State narrative,[5] there is little need to indulge in the debate here. For present purposes, a bias in favour of intervention is adopted simply because momentum seems to have shifted decisively in this direction over the past couple of years.

The more interesting question, then, is whether antitrust, *as opposed to any*

1 *See* similarly Furman and others (2019) para 1.164.
2 *See* eg Vermeulen, Fenwick M and Kaal [2018] 91.
3 *See* Catalini and Tucker [2019] 861.
4 ibid.
5 For a discussion, *see* Baker (2019) 82-95.

other policy lever, is the right way forward. In response, a simple argument will be offered: enforcing antitrust to redress all our upstream worries is not necessarily an appropriate prescription, especially if reasonable constraints on decision-makers are bypassed or weakened; yet, that should not mean antitrust has no role to play whatsoever.

To this end, let us begin with a brief mapping exercise. Existing laws effectuating market supervision have obvious complementarities and, sometimes, overlaps, but also specificities which need to be properly interfaced (Section 1). It is then shown that deference in antitrust decision-making need not be equated to abdication. Rather, it may constitute a marker of respect and, occasionally, boldness (Section 2). Finally, in some instances, neither antitrust enforcement nor deference are appropriate. At that point, though, the course of action need not be exclusively market-driven, nor should antitrust decision-makers stay mum. (Section 3).

Section 1. Market supervision and the interfacing question

Law is about values and is thus 'deeply and thoroughly political',[6] albeit not in an idiosyncratically personal or partisan way. With this premise, it becomes apparent that laws effectuating market supervision can display a certain degree of complementarity and even overlap.

Take self-preferencing and kingmaking examined in Chapter 4. As we saw there, these practices may be of concern to antitrust because they potentially affect "consumer welfare", either

— (i) *directly* (if one assumes the policy aims to protect *strong* consumer surplus or consumer sovereignty) as consumers may end up with less choice or because

[6] Dworkin (1985) 146.

their ability to make effective decisions might be compromised; or

— (ii) *indirectly* (if the alternative "competitive process" paradigm is endorsed) since, having had their right to EOp compromised, (some) suppliers may be foreclosed or have lower incentives to innovate.

But self-preferencing and kingmaking could also unnerve the consumer protection law decision-maker whose primary mission is to secure consumer welfare by ensuring that consumers' subjective ability to choose remains unimpaired. Potential complementarity and even overlap accordingly exist if "consumer sovereignty" is taken as antitrust's lodestar.

Similarly, think of "coercive" contractual practices (as theorized in Chapter 3) that may be expressions of SBP. These might trouble antitrust decision-makers, especially those guided by the protection of competition as such (and hence the economic freedom of providers). However, they could likewise unsettle the contract law judge as orthodoxy in the latter's field has it that these are 'the laws of freedom.'[7] There is again scope for overlap.

The question, then, is: how do we interface antitrust with other market supervision levers? Dealing with it is necessary since some would argue that self-preferencing and kingmaking are matters of consumer protection law, which specifically targets misleading behaviour.[8] Plus, others would direct our coercion fears to contract law doctrines of economic duress known to many civil and common law jurisdictions.[9]

One option is to effectively deny the existence of an interfacing issue. If these policy levers are all about market supervision, why not leave it at that, conceptually

7 Fried (1981) 132.
8 *See* Schweitzer, Fetzer and Peitz (2016) 10-12, 32.
9 On this, *see* Akman [2014] 99.

conflate them within this broader category, and cumulate them in practice where appropriate.[10] Aside from probably making the legally non-trivial matter of double jeopardy more prevalent, though, such a move could lead to solipsistic antitrust enforcement. To wit, intervention without regards for, and, therefore, to the potential detriment of, trade-offs achieved within other fields of law. News scraping, we shall see shortly, is a case in point.

The problem of antitrust solipsism (or 'imperialism'[11]) becomes acute if, while accepting the interfacing conundrum, one views competition law as 'the "repair service" for sectors in need.'[12] The reason is that this position paves the way for the misuse of antitrust to achieve objectives (that should be) alien to the policy (like outcome fairness), something which is (or ought to be) legally curbed in most liberal democracies.[13]

At the other extreme, a third stance effectively immunizes from antitrust conduct already covered by another legal area of supervision whose goal(s) may not even necessarily overlap. Yet, this approach – premised on the assumption that antitrust enforcement will be often too costly, inconsistent, mistaken, unneeded,[14] and/or of little

10 *See* eg Hilty (2007) (arguing that doing so 'helps circumnavigating futile delimitation attempts').

11 Bailey [2018] 25.

12 Podszun [2014] 281, 294 (limiting such antitrust intervention to taming dominant firms, but also implicitly condoning the use of unstructured rule-based legal tests).

13 In the EU, for instance, misuse of power is a specific ground for annulling EC decisions (*see* Art 263 TFEU). Annulment follows when 'it appears, on the basis of objective, relevant and consistent evidence, to have been taken with the exclusive or main purpose of achieving an end other than that stated' (Case C-225/17 P *Islamic Republic of Iran Shipping Lines a.o.* ECLI:EU:C:2019:82 [2019] electronic Reports of Cases, para 115). In my view, there is also misuse of power if an EC antitrust decision properly rationalizes the competition problem but then imposes a remedy serving a different end (*see* similarly Case C-477/10 P *Agrofert Holding* ECLI:EU:C:2011:817 [2011] electronic Reports of Cases, Opinion of AG Cruz Villalón, (n 16)).

14 *See Credit Suisse Securities (USA) LLC v Billing* 551 US 264, 265-266 (2007) (interpreting US securities regulation as precluding antitrust enforcement against efforts by investment banks underwriting an IPO to collect potentially excessive commissions).

added value[15] – appears more reflective of laissez-faire ideology than empirically-grounded analysis.

A more reasonable mindset, then, would be to accept a residual, gap-filling, role for antitrust insofar as intervention can be properly rationalized.[16] Put differently, problematic practices that cannot be effectively redressed by other policy levers should be handled through competition law *provided* they are genuine competition problems which can be enforced. This posture on the interfacing matter nevertheless still seems too unprincipled. As we saw in Chapter 6, antitrust decision-makers who take the resolute path to enforcement could try to further non-antitrust objectives by, for example, imposing remedies that reflect a concern for outcome fairness instead of the identified competition problem. Consequently, the better view would be to countenance antitrust excursions only where they also do not actively pursue non-antitrust objectives and/or undermine (or conflict with) those other areas of law.[17]

Section 2. Deferential Antitrust: between respect and boldness

In dealing with upstream platform power plays, proper interfacing will thus inevitably sometimes require deference from antitrust decision-makers to the choices made by those responsible for other policy levers. In some instances, this may just be a necessary marker of respect (A). In others, deference can actually signal boldness (B).

A) Deference as respect

Consider the specific matter of news scraping which, as explained in Chapter 5, is

15 *See Trinko* (n 214) 399-400 (2004*)* (rejecting antitrust enforcement against an incumbent local exchange carrier accused of denying interconnection services to rivals).

16 *See* eg Crémer, de Montjoye and Schweitzer (2019) 5, 63-65; Schweitzer and others (2018) 104-107, 110, 118-119, 121, 165; Patterson (2017) ch 1.

17 *See* similarly Ritter (2019) 19.

particularly difficult to rigorously rationalize as a competition problem. From a "consumer welfare" perspective, there is an intuitive innovation theory of harm that is not (and maybe cannot currently be) formalized. Under the "competitive process" paradigm, by contrast, we can make a rigorous EOp case. Enforcement, though, would come close to accepting the empirically refutable (and plausibly undesirable) idea that competition is (or should be) a *desert*-based process. To repeat, the *main* (if not only) issue with news scraping is that it offends our sense of *outcome* (in particular, *stakes*) *fairness* towards publishers. This is something antitrust cannot reasonably (be misused to) achieve directly.

So, assuming that the plight of publishers is socially troubling, how should we address it?

If a free-riding problem does exist, the most obvious solution is property, here, copyright.[18] One option would hence be to trust copyright law's ability to incrementally correct its own perceived defects. Recall that news scraping is virtually inseparable from the act of hyperlinking; copyright courts could thereby try to refine their case-law on the right to communicate protected works to the public to strike a better balance between the need to preserve the internet as a vector of free speech and the interests of publishers.[19]

And if current copyright laws cannot be stretched further, we have the possibility for democratic reform. In this regard, by endowing press publishers with a new (neighbouring) right covering their press publications on explicitly redistributive grounds, the EU has recently laid the groundwork other societies may choose to follow

18 *See* eg Barnett [2018] 1097.

19 For a useful US-EU comparative analysis on hyperlinking and copyright law, *see* Ginsburg and Strowel (2019).

or, better yet, improve upon should they share similar anxieties over outcome fairness.[20]

Granted, some commentators have opined that antitrust enforcement should remain on the table.[21] The reason, we are told, is that copyright is not redistributive enough since 'the issue is not whether Google and Facebook should compensate news publishers for displaying parts of their content on the platform (they should), but whether they should also compensate them for the enormous indirect value they bring to these platforms.'[22]

Such advocacy is undeniably laudable. However, it underscores a concern which is no longer about scraping anymore but pertains to the perceived unfairness of the platform business model as such. More fundamentally still, doesn't the claim manifest precisely the type of solipsistic attitude copyright lawyers have long railed against?[23] For a rare consensus among the latter has it that the new EU press publishers' right is, in itself, unsound and unjustified.[24]

To me, societal choices must be respected, which is why antitrust must defer. IP is not only property. In liberal democracies it also represents democratic regulation *for* economic competition through the establishment of entitlements that determine both its objects and organization.[25] Crucially, outcome fairness can and is woven into the

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20 Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC [2019] OJ L130/92, Recital 3. In effect, platforms – not just the most powerful ones – will have to take out licences whenever they display news publications within their respective platform infrastructures, including snippets of a certain length. *See* Papadopoulou and Moustaka (2020) for a comprehensive analysis.

21 *See* eg Geradin [2019] 0, 22.

22 ibid.

23 *See* eg Jacob (2005) ch 19.

24 *See* 'Academics against Press Publishers' (2018). *See* also Hugenholtz [2019] 1006; Pihlajarinne and Vesala [2018] 220; Bently and others (2017); Geiger, Bulayenko and Frosio [2017] 2002; Senftleben and others [2017] 538; Hilty; Köklü and Moscon (2016). The general arguments are that (i) digitization, rather than free-riding platforms, is the driver behind declining press publisher revenues, and that (ii) publishers are already sufficiently protected.

25 Ullrich (2001) 372-374.

very fabric of IP, whether IP lawyers like it or not.[26] Competition, in turn, is the process that diffuses value generated by market players across this economy.[27] And antitrust serves to ensure its proper operation. Therein, though, lies the policy's sole function. Competition law is not 'a device to fine-tune markets via top-down planning',[28] nor is it there to correct perceived defects in the political process.[29]

In short, news scraping requires antitrust deference because, as Justice Brandeis would say:

> [T]aking and gainful use of a product of another which, for reasons of public policy, the law has refused to endow with the attributes of property, does not become unlawful because the product happens to have been taken from a [vertical or horizontal] rival and is used in competition with him.[30]

Deferential antitrust is also desirable as other options for redress do exist. Unfair competition looks particularly apt where doctrines of misappropriation still have some bite.[31] Continental Europe, for instance, seems especially apropos since investment, *as such*, 'is in certain national legal systems or, at any rate, in terms of case law, regarded as a subject matter worthy of protection'.[32] Take France, where the Paris Commercial Tribunal recently condemned an OTA for scraping the website of a well-known budget

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26 Under most accounts, property and fairness are incompatible. However, Merges (2011) makes the powerful argument that 'fairness considerations not only surround or transcend individual property rights; they are also built into the structure of individual property rights.' As he explains, distributional nuggets – for instance, limitations and the "fair use" doctrine in EU and US copyright law, respectively – can be found at all levels of an IP regime and 'go a long way toward justifying IP institutions as a whole.'

27 Similarly, *see* Ullrich (2001) 378 ('Competition is to determine the economic yield of the system').

28 Colomo [2016] 201, 217.

29 *See* Hovenkamp (2005) 254.

30 *INS* (ch 5 n 142) 258 (Brandeis dissenting).

31 Admittedly, there is little judicial appetite in the US (*see* Tragone [2016] 237).

32 Hilty (2007) 20, but arguing that from a normative perspective, an alleged victim of misappropriation of non-IP protected efforts 'can only be protected in as far as he would withdraw from the market concerned or even not invest in it at all without the protection against a takeover of his investments'. *See* Ohly [2010] 506 (exploring the European legal landscape).

airline of its flights-related data to sell tickets at a markup.[33] Why? Because the practice (apparently) deprived the latter of its opportunity to recoup its investments.[34]

Another avenue worth considering is one several antitrust authorities have endorsed. It involves legislatively requiring certain platforms to implement a code of conduct governing their relations with providers, including press publishers.[35] More on this shortly.

Finally, if societies value things like quality journalism, they could choose to assist publishers either through public grants, and/or tax breaks, and/or fiscally incentivized philanthropy.[36]

Do the preceding arguments entail foreclosing antitrust decision-makers from the discussion altogether? Certainly not. With regards to the news sector in particular, public enforcers can promote joint ventures for testing new approaches to monetizing content by applying more relaxed enforcement standards.[37] Ironically for publishers, the powerful platforms they often vilify probably must be part of the solution.[38] Furthermore, if a new regulatory venture is considered, competition issues – and hence antitrust decision-makers – need to be included in debates.[39] Finally, when confronted with upstream platform power plays that chiefly offend non-antitrust values, antitrust agencies and courts can evaluate the merits of being boldly deferent, which is what we now turn to.

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33 *Voyages sur Mesures and LMnext FR v Ryanair* (RG 2013031969) Paris Commercial Court Judgement 20 March 2018.

34 ibid 9-10.

35 *See* ACCC (2019a) 255-257; CMA (2020b) para 7.76 and Appendix S.

36 *See* ACCC (2019a) ch 6.9. *See* also Stucke and Grunes [2011] 1399, 1416.

37 *See* Stucke and Grunes [2011] 1399, 1415.

38 *See* Nilson (2019) reporting on one such joint venture between a British publisher and Alphabet/Google.

39 *See* infra Section 3.

B) Deference as boldness

Deference on the part of the antitrust decision-maker can be a marker of boldness when non-enforcement simultaneously fits within the selected antitrust paradigm and indirectly promotes the aim(s) of another policy lever. To understand this, one needs to once again appreciate the practical relevance of the choice between available antitrust paradigms. Otherwise, deference (or non-enforcement) would often rightly be construed as the grant of an unwarranted immunity. For public enforcers, the latter can be just as sinful as erroneous intervention.[40]

Recall that bargaining power imbalances favouring platforms appear to be a key driver of alleged upstream abuses. Distributive effects of these power plays might be mitigated if suppliers somehow managed to coalesce. Press publishers, for example, certainly think so as they routinely lobby policy-makers to have their horizontal agreements exempted from antitrust scrutiny, sometimes successfully so.[41] Bargaining power asymmetries should, of course, flash on the radar of reasonable "consumer welfare"-minded antitrust decision-makers.[42] Yet, even where market power is at play, the latter may not see the problem; battle-tested static models surely are better than speculative intuitions on innovation. Moreover, complicated game-theoretic studies might mislead them when available. Under the "consumer welfare" paradigm, there is thus little cause for sanctioning what would otherwise be frowned upon – a cartel – to remedy a competition problem reasonable decision-makers will have troubles formally

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40 *See* eg Art 265 TFEU.

41 In 2017, Germany amended its competition law to his effect (*see* s 30 GWB). At EU level, the EC notified its intention to exempt a resale-price-maintenance agreement covering newspapers sold in Belgium in *Agence et Messageries de la Presse* (Case IV/31,609) European Commission Notice [1987] OJ C164/2. In the US, the Newspaper Preservation Act of 1970 provided a partial antitrust exemption which press publishers would have society expand in the platform age (*see* Rutenberg (2017)).

42 Recall ch 6 text to 162.

rationalizing and/or enforcing.

The (in)famous *e-books* conspiracy mentioned in Chapter 3 offers a particularly appropriate illustration of this reality. Publishers assuredly did have an Amazon-size countervailing bargaining power reason for enlisting the support of Apple to raise the retail price of e-books. Pressing forward, though, was like giving the DoJ a rod for their own backs. As one commentator puts it:

> While Amazon's substantial market share and relentless demands for concessions made it impossible to rule out future effects, their likelihood was not great enough to warrant a conspiracy that imposed immediate and substantial price increases on consumers. In the e-books case, in short, Amazon's buyer power did not justify collusion.[43]

Still, does adopting the "competitive process" paradigm, which is sensitive to worries over providers' economic freedom, mean endorsing a bonfire of antitrust exemptions? The answer should be negative for two reasons.

One: although jurisdictions known to have historically embraced this alternative approach (such as the EU) do absolve (ex-ante or ex-post) some otherwise illegal agreements, these immunities are really quite limited in number and may often owe more to political capture and/or genuine social fears than to any serious pledge to competition as such.[44] Besides, a comparative analysis with countries undoubtedly committed to "consumer welfare" (such as the US and Australia) would probably reveal that deferential antitrust is both more prevalent[45] and just as unrelated to competition.[46]

Two: protecting competition as such, to repeat, ought not imply disregarding its

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43 Kirkwood [2014] 1, 51.

44 *See* eg Arts 39-42 TFEU for the agricultural sector.

45 The US contains a laundry list of federal immunities (i) granted by government or courts under the Noerr-Pennington, or (ii) explicitly or implicitly provided in federal regulation. Added to this are the numerous exemptions granted by states under the *Parker* doctrine (*see* generally ABA Section of Antitrust Law (2007)). In Australia, the ACCC is proposing to develop a "class exemption" that would provide cover for many agreements (*see* ACCC (2019b)).

46 The consensus among US commentators is that most antitrust immunities are the result of political capture (*see* Stucke and Grunes [2011] 1399, 1402).

outcomes. The "competitive process" paradigm *assumes* that, by preserving the appropriate balance between economic power and freedom on the market, desirable results will ensue, notably by way of lower prices, greater output, higher quality, diversity, and innovation. But if a cartel – itself a restriction of the cartelists' freedom – created to offset the SBP of a platform is shown to (likely) generate nothing more than a wealth transfer, then there is no reason for antitrust decision-makers to defer. If an immunity is truly justified in such a case, society should establish it through a political decision that reflects a conscious and deliberate choice to sacrifice competition on the altar of outcome fairness.

So, in practice, would the reasonable antitrust decision-maker guided by the "competitive process" imperative have deferred in the above-mentioned *e-books* case? Not if, as some have convincingly argued, the conspiracy could not deliver credible benefits.[47] Situations where deferential antitrust will constitute a warranted act of boldness do exist, however.

Consider the plight of labour platform-"partners". In Chapter 3, it was contended that a theory of oppression could explain the potential competition problem in powerful platforms hardwiring within their infrastructure's design various institutional constraints on providers/workers that systematically place the interests of consumers/employers as sovereign. As discussed in Chapter 6, though, reasonable antitrust *enforcement* will be stymied by difficulties in establishing a structured legal test, which, it bears repeating, wards off arbitrariness. What's more, devising an appropriate remedy might also prove devilishly complex. To stick with the liability theory, one would need to compel the labour platform to return to providers/workers part of their autonomy, for instance, regarding price-setting or job selection. Aside from

47 *See* Sagers (2019); Kirkwood [2014] 1.

potentially interfering with the platform's business model, such a solution would put the reasonable antitrust decision-maker in uncomfortable regulatory shoes.[48] This is where deference comes into play.

Why, though, would turning a blind eye to labour platform-providers/workers unions reflect boldness and not capture? The answer flows from what this section suggested at the outset.

Firstly, there is a formal competition problem – oppression – to which deferential antitrust provides a fix (ie the "fit" condition). Importantly, collective bargaining by labour platform-suppliers/workers would probably not create the same sure-fire negative market effects as would that of, say, independent physicians. Unionization by the latter should not be blithely waved through as some would have them.[49] Why? Because it can demonstrably be predicted to impede economic efficiency and increase health care costs without necessarily improving (and perhaps even diminishing) its quality and access to it.[50] By contrast, immunizing collective action by labour platform-providers/workers is more likely to make labour markets more efficient[51] and 'help companies respond to demographic and technological change.'[52] Doing so definitely would generate some upward pricing pressure or reduction in output on the product market. Yet, that impact should be no greater than what is already authorized under current antitrust laws around the world when functionally equivalent employees are concerned.[53]

Secondly, there is a regulatory failure here. Indeed, labour lawyers are

48 Interestingly, Uber is testing these solutions in California where it suffered several legal setbacks on the labour law front (*see* Preetika (2020)).
49 *See* eg Vaheesan [2019] 766, 809ff.
50 *See* Brewbaker III [2002] 575.
51 *See* OECD (2019a) 206-207.
52 ibid 194.
53 *See* similarly Lao [2018] 1543, 1572.

increasingly recognizing that platforms have disrupted their field. As one judge put it, determining whether labour platform-providers are independent/self-employed contractors unprotected by labour laws, or instead employees falling within their protective scope, is often like being 'handed a square peg and asked to choose between two round holes.'[54] In a striking parallel to antitrust, some scholars are even debating whether labour law's normative foundations need to be reconceptualized.[55] The dilemma, however, is that the appropriate response under this policy lever is presently unclear[56] if only because of a data deficit.[57]

Without compromising its internal coherence, antitrust can therefore (temporarily and imperfectly) fill the regulatory vacuum by being boldly deferential when confronted with a coalition of labour platform-providers/workers.[58] In truth, this is a necessary step since labour and competition laws are currently set up as antagonistic, rather than complementary, policy levers.[59] And there are several options.

One involves narrowing antitrust's personal scope that today catches all economic undertakings. How? Perhaps by relying on a functional approach, which leverages the idea of false self-employment and/or economic dependence;[60] or by

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54 *Cotter v Lyft Inc* 60 FSupp 3d 1067, 1081 (NDCal 2015).

55 *See* the special edition of the International Journal of Comparative Labour Law and Industrial Relations [2017] 331.

56 Some argue that a new category of workers with more limited rights than employees should be recognized under labour law (*see* eg Taylor and others (2017) 35). Others claim the legal tests for employment relations needs to be updated, either by tweaking the employee-centric tests (*see* eg Cherry [2016] 577) or by shifting to an employer-focused perspective (*see* Prassl and Risak [2016] 619). A minority would rather have market-based solutions (*see* eg Malin [2018] 377).

57 *See* Hawley [2018] 5, 12-14.

58 *See* Vestager (2019d) ('we may need to make clear that nothing in the competition rules stops those platform workers from forming a union.')

59 *See* Lianos, Countouris and De Stefano [2019] 291, 307, 331.

60 In Europe, this is already positive law. At EU level, the CJEU developed a multi-factorial test to be applied on a case-by-case basis whereby a sufficiently dependent contractor has to be viewed as an employee for antitrust purposes (*see* Case C-413/13 *FNV Kunsten* ECLI:EU:C:2014:2411 [2014] electronic Reports of Cases). In Ireland, the legislator enshrined a collective bargaining antitrust exemption for a defined category of "false self-employed workers" (*see* Competition (Amendment) Act 2017).

devising a new antitrust concept of "worker" decoupled from labour law.[61]

Alternatively, antitrust's material reach could be tinkered with, maybe by broadening the range of justifications for prima facie restrictions of competition. For legal certainty's sake, one could enshrine this in legislation (such as a block exemption regulation in the EU) or in a soft law instrument (such as public enforcer guidelines).

The foregoing notwithstanding, it bears repeating that the path of bold deference will not always be open to antitrust decision-makers. As noted earlier, those steered by "consumer welfare" will often justifiably have a hard time seeing platform-provider coalitions as anything other than plain vanilla cartels, even when labour is involved. The FTC and DoJ's joint torpedoing of the city of Seattle's attempt to grant collective bargaining rights to Uber drivers is another case in point.[62] Here again – this time in litigation initiated by a private enforcer – both federal antitrust agencies argued that the move unlawfully sanctioned a per se antitrust violation.[63]

Furthermore, there will be instances where, regardless of which paradigm the antitrust decision-maker feels betrothed to, neither enforcement against a powerful platform, nor deference towards a countervailing collective effort of victimized providers are reasonable prescriptions. When antitrust reaches its limits, however, the answer is not necessarily (only) the market. Sometimes, we (also) need to turn to regulation.

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61 *See* Lianos, Countouris and De Stefano [2019] 291, 310-322. However, their third option – using a social dumping rationale – is not about competition as such even if it does reflect a genuine social concern.

62 Brief for the United States and the Federal Trade Commission as Amici Curiae in Support of Appellant and in Favor of Reversal, *Chamber of Commerce and Rasier v City of Seattle et al*, 2017 WL 5166667 (CA9).

63 *See* Steinbaum (2017).

Section 3. Regulation and participative antitrust

A) The need for regulation

Upstream platform power plays, it was shown, can prove difficult to redress by reasonable antitrust decision-makers. Other policy levers will sometimes have to be activated. And where the latter fail, the only appropriate response might well be new regulation. This option should be seriously considered if the identified upstream anxieties are mainly about unfair wealth distribution towards suppliers. Ditto when they pertain to systemic, regulatory, panoptic and/or informational power as such. These issues, as others have explained, 'comprise the substantive, inescapable core of regulation.'[64] Two additional reasons further bolster this conclusion.

One: the type of remedies touted for effective redress. Recall that these range from far-reaching behavioural obligations (such as non-discrimination and transparency requirements, forced interoperability and data sharing requirements, and even duties of care) to platform unbundling.

Two: historical precedents where decision-makers were pitted against similarly problematic "foes", most notably telecommunications operators. To illustrate, in the EU, a telco market may warrant regulatory intervention when it displays stubbornly high levels of both market concentration and entry barriers that antitrust alone cannot sufficiently address.[65] In the US, regulatory ventures against telcos have likewise been premised on the fact that these operators wield "gatekeeper" power.[66]

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64 Dunne (2015) 174. *See* also Weatherill (2007) 5 (regulation 'is not simply a matter of curing market failure [but is also] devoted to dealing with the consequences of the operation of markets—and, in particular, to curtailing what may be seen as excessive successes accruing to some participants.')

65 *See* Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code [2018] OJ L321/36, Art 67(1).

66 *See* eg *Protecting and Promoting the Open Internet* 30 FCC Rcd 5601 (2015), para 20.

Some policy-makers and their advisers, it should be noted, seem to agree with this view.[67]

Granted, to speak of platform regulation was until recently somewhat taboo. Conventional wisdom, after all, has it that the regulatory enterprise is inefficient, corrupt, captured, or enacted with the best of intentions but impossible to get right in practice.[68] Regulation, however, is not 'some form of chemotherapy for the body politic.'[69] It is simply another policy lever 'by which we simultaneously express the values of our society and the mechanism by which we seek to achieve real-world outcomes consistent with those values.'[70]

This does not mean objections to regulation should be smothered. Those grounded in public choice (ie private interest) theory – which claims decision-makers are unable, or have little incentive, to serve the public good – although difficult to test empirically, are not inherently misguided.[71] And those reflecting discontent with past regulatory mishaps may be justified.[72] Still, to elevate them both from caution to dogma is to replace careful analysis with plain cynicism or to draw the wrong lessons from history. What we need, then, is regulatory innovation.

B) Regulatory innovation and participative antitrust

Time, it seems, is of the essence when it comes to platforms. If so, our traditional "command-and-control" way of thinking regulation needs to change. Here again, decision-makers are in a bind. On the one hand, there is pressure to act fast; on the other

67 *See* Appendix A.
68 For a discussion, *see* Dunne (2015) ch 3.
69 Feld (2019) 15.
70 ibid.
71 CMA (2020a) para 3.10, finds that there is 'some evidence in the available literature to support the private interest theories of regulation to a greater extent than public interest theories.'
72 *See* Wilson and Klovers [2020] 10 (discussing the failures of 20th-century US railroad and airline regulations).

hand, platforms are atypical regulatory targets[73] operating in markets regulation has typically struggled with.[74] Moreover, double-information asymmetry disadvantages – adverse selection and moral hazard – that saddle any regulatory venture are exacerbated, thereby magnifying the risk of failure.[75] Lastly, whatever its objectives, conventional-style regulation often means protracted processes resulting in rigid rules,[76] which – to make matters worse – have been found to have a generally negative impact on competition.[77]

With this in mind, what regulatory approach should we consider when dealing with those upstream worries antitrust alone cannot (sufficiently) redress? Self-regulation – the default so far – hardly seems appropriate, although some jurisdictions may nevertheless maintain their faith in it. For instance, in India, the CCI concluded its study into e-commerce marketplace platforms by opining that bargaining power imbalances and information asymmetries between the platforms and suppliers – identified as the crux of the issue[78] – should essentially be remedied by the platforms themselves through measures geared towards promoting transparency in search rankings, data practices, review/rating mechanisms, revision of contractual terms, and discount policies.[79]

To me, given the twin imperatives of speed and effectiveness, the right approach

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73 Indeed, typical regulation is either sector-specific or issue-specific. Platforms are business models that cut across sectors and touch upon a variety of issues.

74 For instance, telco markets – which are both similarly fast-moving and exhibit "natural monopoly-like" features (including network effects) – have notoriously bedevilled regulatory ventures on both sides of the Atlantic.

75 *See* Tirole (2017) 457 ('The company has better knowledge of the environment in which it is operating: its technology, its supply costs, the demand for its products, and its services (adverse selection). Its actions also affect cost and demand through the management of human resources, strategic decisions about production capacities, R&D, brand image, quality control, and risk management (moral hazard).') (footnote omitted)

76 *See* similarly CMA (2020b) para 7.67.

77 *See* CMA (2020a) para 4.61 ('greater regulation is – on average – associated with lower competition.')

78 CCI (2020) para 112.

79 ibid para 113.

would be less permissive than self-regulation but more incentivizing and flexible than its "command-and-control" variant. The method – somewhat vaguely dubbed by Tirole as "participative antitrust"[80] – must thus be more collaborative, adaptive, anticipative and reflexive.

If fair and sustainable *outcomes* for suppliers is something societies want, regulation is needed; regulation that, however, catalyzes collective innovation from the market to conduce these desired results, while remaining attuned to its effects on competition. Participative antitrust tries to achieve this by combining two ingredients. One is traditional regulatory "Lamarckism", ie prescribing market behaviours to realize defined outcomes. The other is a hint of "Darwinism". Here, platforms and providers are, in the first instance, entrusted to negotiate solutions, perhaps through a code of conduct. Crucially, though, the setting is overseen by the antitrust decision-maker whose role is two-folded: neutralize bargaining power asymmetries among stakeholders; and ensure negotiated correctives stay within limits delineated by the legislature and do not compromise competition.[81]

The result is regulation of the likes envisioned by the EU for creating a fair, transparent and predictable "platform-to-business" environment.[82] Therein an attempt is made at taming upstream-facing regulatory, informational and relative market power through an instrument that combines two sets of restrictions:[83] transparency obligations similar to, but more extensive than, those recommended by the CCI under a self-regulatory approach; and light-touch duties of care. Importantly, the backdrop is

80 Schrager (2018) quoting Tirole.

81 *See* Curien (2011) 3-6; Maxwell (2017) 174. *See* also OECD (2014) 8-9.

82 Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services [2019] OJ L186/57 (hereinafter "P2B Regulation").

83 For instance, Art 8 P2B Regulation includes obligations geared towards ensuring that P2B contracts are 'conducted in good faith and based on fair dealing'.

collaborative. Platforms and suppliers are given the lead, although negotiations are to be monitored and periodically reviewed by the EC.[84]

Of course, this experiment to address upstream concerns that overstretch reasonable antitrust perhaps does not go far enough. Yet, societies can choose to push further while remaining within this regulatory paradigm. This is precisely what some of our antitrust decision-makers and their advisers seem to recommend when they advance regulation as a solution to broader matters of systemic power and outcome fairness-related practices, such as news scraping.[85] Notably, the EU and Australia appear to have already taken the message to heart.[86]

Critics favouring a more prescriptive approach will doubtless be quick to argue that it plays into powerful platforms' hands.[87] And, to be sure, participative antitrust has its shortcomings. Even so, wouldn't this stance also constitute empty cynicism? There are only 'imperfect alternatives.'[88] Among them, participative antitrust seems particularly fit for purpose. For example, it appears to have proven effective in the UK to address similar outcome fairness considerations in the groceries industry.[89] Plus, if we are to learn something from telco regulation, it is that this more "maieutic" method can succeed where a command-and-control approach will struggle. The EU is a case in point. There, national regulatory authorities can saddle powerful telcos with obligations relating to access and interconnection. In France, though, the regulator – ARCEP –

84 *See* Arts 16-18 P2B Regulation.

85 *See* eg CMA (2020b) ch 7 (spec paras 7.35-7.39), paras 8.15-8.18 and Appendices P, S, U; ACCC (2019a) 253-256. *See* also Furman and others (2019) para 2.45; Stigler Committee (2019) 115-116; BRICS Centre (2019) 456; Study Group (2018) 8.

86 *See* EC Ref.Ares(2020)2877647 (suggesting the revision of the P2B regulation as one option to tame powerful platforms); Smyth (2020) (reporting on draft legislation currently moving along the Australian legislative train).

87 Alphabet/Google representatives, though writing in their personal capacity, have publicly endorsed the approach while trying to poke holes at it to make it more permissive (*see* Bethell, Baird and Waksman [2020] 30, 50ff).

88 Komesar (1994).

89 *See* CMA (2020a) para 6.9.

created an interconnection committee where details of the incumbent's interconnection products and reference interconnection offer were debated. Because the committee comprised representatives from the involved stakeholders, ARCEP managed to nudge market players towards a consensus on complex issues like local loop unbundling, something it would have struggled to achieve on its own due to information asymmetries.[90]

Concluding reflections

Powerful platforms seem brazenly settled. Consumers and suppliers, though, appear, respectively, somewhat content and often dishearteningly short-changed. Upstream platform power plays should therefore prompt private and public antitrust enforcers into action when intervention can be rigorously rationalized. For the apparent status quo ought to unnerve our antitrust decision-makers if we truly are committed to competition, regardless of whether deontological or instrumental value is ascribed to it. Remember, effective competition, is supposed to be unpredictable. So, if only the powerful platforms always win, it must be out of kilter. Yet, where decision-makers must mangle antitrust to achieve (moderately) effective redress, this is perhaps a sign that we must look elsewhere. Not necessarily to the market, but (also) to other policy levers.

Competition law is not a Swiss Army knife for fixing all problems. Private power, while a catalyst for its development in some jurisdictions (like the US), is not a problem as such. Should this dogma no longer reflect reality, societies should have a serious discussion over amending and renaming their respective competition laws accordingly. Moreover, outcome fairness for suppliers cannot justifiably be directly

[90] Maxwell (2017) 175.

engineered through antitrust, despite it being undeniably vital to ensuring a sustainable platform economy. If it must, we should stop referring to the policy as having anything to do with competition.

As observed by Commissioner Vestager, antitrust

> [C]an't deliver all the sustainable results that our society demands. And that's OK. It means we won't build a sustainable world just on the foundation of companies' voluntary actions. But we don't have to – because we also have the power, as a society, to put regulations in place that can make our economy more sustainable. We've done that for many years, of course, when we've found that competition isn't enough to make sure our markets respect our society's values. And this is the way a society should work.[91]

When looking at past regulatory ventures for inspiration, we nonetheless need to draw the right lessons. One is that some of those regulations that have attracted near-universal scorn – say, the US Interstate Commerce Act – should perhaps not (only) be seen as costly and/or captured policy mistakes; they are probably (also) politically efficient responses to (prevent) "backlash" in an unfair society.[92] Another insight is that, if these types of traditional regulation – though legitimate and well intentioned – ultimately failed to deliver and even harmed competition, then we should look to innovate our regulatory ways by infusing more flexibility.[93]

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91 Vestager (2019d).

92 Roe [1998] 217, 229.

93 CMA (2020a) para 4.65 (finding that 'in dynamic markets more flexible forms of regulation can reduce the risk of deterring innovation, and therefore harming competition.')

CONCLUSION

At the outset, this thesis was billed as an introspection into antitrust. Not only by reason of wayward curiosity, but because developments on the policy-making front impel it. Policy-makers and some antitrust decision-makers seem to have indeed assumed that upstream platform power plays are relevant antitrust concerns. Yet, anything powerful platforms do triggers "footballized" debates among antitrust academics nowadays.[1] The full breadth of the issue of "upstream" effects in the platform economy is, furthermore, something only a handful of scholars have put their finger on. More paradoxically still, the same fears have been all but written off the policy agenda for the brick-and-mortar economy.

So, what comes out of the exercise? Let us first briefly recap what was uncovered before turning to some final reflections.

Section 1. Taking stock

The nutshell message of this thesis is that platform practices which harm suppliers (who may themselves be platform operators) are potential competition problems; yet, antitrust enforcement, far-reaching as it can be, ought not always be oversold and taken as the prescription of choice. To rephrase: while antitrust is obviously relevant in the sense that decision-makers should be unnerved by (allegedly) victimized platform-providers, relevance is a question of degree. Prodding the argument further leads to three general claims.

- The battle for antitrust's soul should be waged, but not for conventional reasons

[1] *See* Colomo (2019).

Contrary to what some would have us believe, "consumer welfare" – antitrust's dominant paradigm for the last few decades – is not *inherently* conducive to upgaze paresis. That contemporary theoreticians and practitioners have tended to only "look down" because of their focus on a specific variation of the lodestar – namely, consumer surplus, reflected in short-run pricing effects – is a reality few would deny today. This, however, is a methodological weakness not a foundational one. In other words, the critique would be moot if economists were to develop analytical tools decision-makers could use to consistently and robustly predict the long-term consequences of business practices on things like supplier incentives to innovate; or, failing that, if we were to indulge in more speculation.

Nevertheless, those who favour a paradigm shift do have a couple of legs to stand on; "looking up" merely solidifies them.

For one, "consumer welfare" is a rather beguiling ideal whose different avatars actually rest on potentially shaky foundations. That antitrust should be about "welfare" (which is to say Pareto or Kaldor-Hicks efficiency) or be grounded in a theory of (distributive or corrective) justice-to-consumers/customers, is a *normative* issue the community has buried under aspirations of "scientific" rigour. Granted, economics has given us the means to articulate claims with analytical precision. Yet, this is not a good enough reason to have antitrust directed towards a goal many reasonable minds might find undesirable. Our platform-provider anxieties, therefore, only exacerbate what ought to be evident: we need to openly (re)discuss the normative fulcrums of what we have been doing for the past few decades.

All the more so since, for another, the only other available lodestar can be seen as a worthy replacement when time is taken to unpack it. Antitrust, most of us would agree, must be about "competition" and cannot pander to suppliers for their own sake.

Properly construed, then, the alternative paradigm means safeguarding the constitutive values of the competitive process (namely economic freedom and ex-ante fairness). By design, (platform-) providers would have an immediate right to antitrust protection which is only indirectly forthcoming under the "consumer welfare" lodestar.

Ultimately, though, the battle for antitrust's soul is not a fight for the inclusion of upstream considerations per se. It is rather an ethical struggle over why liberal antitrust societies should value competition.

- Upstream platform power plays are potential competition problems, but the devil is in the detail

Regardless of the antitrust paradigm one is biased towards, victimized providers do have a case for antitrust enforcement against the powerful platforms they depend on in a variety of situations. In fact, if (informed) intuition is the reasoning benchmark, it will almost always be possible to theorize some form of relevant harm.

Consider each of the three scenarios examined in this thesis. When can we not argue innovation and/or diversity in the marketplace *might* diminish to the detriment of consumers where powerful platforms exploit providers through their despotic, game-mastering or free-riding practices? The latter actions aside, can we not always contend that the same behaviours *could* undermine the economic freedom of suppliers or the EOp without which the sustainability of competition would be jeopardized?

There is, nonetheless, a consensus imperative for rigour when it comes to rationalizing potential competition problems. Needless to say, this complicates things.

From a "consumer welfare" perspective, difficulties track the technocratic nature of the antitrust enterprise it entails, one almost exclusively driven by economic analysis. What competition lawyers sometimes forget is that '[i]t is unimportant that "there are models" showing anticompetitive effects, the key is whether such models

need assumptions that tightly map into the market circumstances of the case.'[2] Yet, when it comes to upstream platform power plays (at least those explored in this thesis), we have seen how predictions on "consumer welfare" implications are not only ambiguous; they are also based on assumptions which

- (i) are not always spelled out in ways non-economists can understand (recall our discussion of Alphabet/Google's self-preferencing tactics);
- (ii) often cannot be generalized (as in the case of kingmaking);
- (iii) are sometimes so finely grained that when competing models exist for a particular situation it becomes virtually impossible to choose the "correct" one (as illustrated by the tussle between Amazon and book publishers); and
- (iv) can ultimately be denied by empirical studies which may themselves paint an ambiguous picture depending on the setting, as well as the data and methodology used to carry them out (like our analysis of Sherlocking showed).

Naturally, such complexity is not new.[3] The well-known problems it generates, however, are exacerbated in the context of platforms since research is still playing catch-up. Some less equipped decision-makers – generalist courts and inexperienced and/or under-financed competition agencies – will therefore be more likely than they already are to shun sophisticated, yet potentially more accurate models, in favour of simpler, but inaccurate ones;[4] others may simply follow their (informed) intuition. And those who (think they) are better armed to deal with higher levels of complexity may shift even more attention to making resource-draining, and ultimately value-laden, decisions on the appropriateness of each model instead of focusing on the legality of

2 OECD (2018) 227.
3 *See* generally Marty (2017).
4 ibid 69.

impugned practices.[5]

A particularly penetrating example of this point is the SCOTUS's notorious *AmEx* judgment over the despotic behaviour of an autocratic, multi-sided, non-digital, platform.[6] At issue, more specifically, were the rules a payment card operator – American Express – imposed on merchants using its infrastructure. These prevented them from encouraging consumers to use rival credit-cards with lower merchant fees (like Visa). Now, economists have explained how such "anti-steering" rules can generate positive "consumer welfare" effects when certain assumptions are made.[7] Yet, the facts of *AmEx* did not map onto them. Furthermore, the most probable counterfactual – the "but-for" world absent those rules – suggested that "consumer welfare" (however understood) would have improved.[8] The likely effects of the impugned practice, in sum, were negative. The SCOTUS majority overlooked this. Worse, it completely ignored the extensive trial record, which clearly showed that AmEx's behaviour had led to price hikes. Not only for AmEx merchants, but also for those using rival platforms like Discover, as well as for consumers to whom merchants passed on higher fees via inflated product prices.[9] The only winners from the restrictive scheme were AmEx and the subset of AmEx cardholders whose subjective valuation of AmEx perks would have prevented them from choosing other payment methods absent the steering restrictions.

So why did the SCOTUS majority support such an outcome? The answer is that it relied on multi-sided markets economics without fully untangling its implications. Indeed, the Court properly took the theory to mean that all sides of the platform needed

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5 ibid.
6 *AmEx* (ch 3 n 68).
7 For a good discussion, *see* Hovenkamp [2019] 713, 734ff.
8 ibid.
9 Justice Breyer highlighted this in his dissent (*see AmEx* (ch 3 n 68) 2293-2294 (Breyer dissenting).

to be accounted for, yet failed to engage in any such examination.[10] The majority likewise confused multi-sided market economists' insistence on balancing the effects borne by each side of the platform with the idea that *market*-wide consequences are trivial. Steering, the Court stated, 'endangers the viability of the entire Amex network.'[11] This is a truism no economist would seriously describe as a problem; not without evidence showing that AmEx's anti-steering was vital to the entire two-sided credit-card market (it wasn't); or proof that the damage to consumers or society resulting from AmEx's ensuing failure would have exceeded the verified costs of the platform's restrictive rules (in all likelihood, it wouldn't). In short, complex economics led an overconfident decision-maker to disregard facts and effectively immunize from competition a practice that curbed merchants' freedom, consequently harming everyone to benefit one platform – AmEx – and a potentially small subset of its consumers.

The rigour test, mind you, would similarly bedevil the "competitive process" paradigm as there is nothing pellucid about economic freedom and EOp. Relevant harm definitely can be formalized in a way that does not take it as if it were self-evident. Platform-providers could further stake a prima facie antitrust case in a wider array of situations than when "consumer welfare" is used as a lodestar. However, seriously embracing the idea of protecting competition as such has implications many would undoubtedly reject.

First, antitrust would turn into a moral enterprise guided by insights from political philosophers. History shows that decision-makers have been either unwilling to engage in the sort of analysis this paradigm requires, or convinced by the superiority of the exclusively economic approach. Besides, although political philosophical

10 *See AmEx* (ch 3 n 68) 2287-2288.
11 ibid 2289.

theories can help us pass the rigour test, they are not devoid of the complexity that similarly hampers the application of the "consumer welfare" lodestar. Philosophers, like economists, have their own language, which an untrained audience – myself included – can easily misunderstand. This, in turn, exacerbates the dangers inherent to moralizing antitrust. Decision-makers cannot just pick whichever theory is convenient for their case; they must act coherently with the underlying vision of the market system established by the peoples they serve. To illustrate, powerful free-riding platforms may restrict the competitive process envisioned by societies wanting to structure competition according to desert; but for those living by the idea that competition should be won by the best players (not those who try the hardest), antitrust enforcement would often be inapposite.

The second implication is that the "competitive process" paradigm is potentially more costly to operate. For it does (or at least, should) not render economic analysis of business practices redundant, especially in situations where the platform-to-provider dynamic is at stake. In other words, while this alternative approach to antitrust focuses primarily on what makes competition sustainable, it must not disregard the process's predictable benefits when they can be proven to the requisite standard. Returning to platforms: (almost) everyone recognizes that their mischiefs will often also generate positive effects. Following a proportionality analysis, these may be found to outweigh their restrictive impact on the competitive process. Consequently, in cases where the legal burden is on antitrust enforcers to establish the benefits of the impugned behaviour, protecting competition as such will encounter the added difficulties which beset them when "consumer welfare" is the lodestar.

- Antitrust is *a* solution, but not necessarily the right one, nor should the price for (moderately) effective enforcement be paid

Antitrust is a notoriously unwieldy instrument. When it comes to platforms, this creates a mismatch since policy-makers seem to agree that competition problems are not only endemic, but are also in need of urgent redress. As we have seen, though, there is flexibility built into the antitrust apparatus.

At the extreme, the bar for liability could be set at a very low standard; the power radar could be fiddled with to register more than mere market power in the economic sense; and sweeping proactive remedies could quite swiftly be prescribed. The prospect is appealing. Even more so in jurisdictions like the US and (maybe) the EU, where (public and private) enforcers have (increasingly) been kept on a tight leash over the last few decades. *AmEx* is a case in point. Enforcement standards set by the SCOTUS there are so exacting that one can only sympathize with those who argue that they are 'tantamount to saying that [antitrust] does not apply at all.'[12] The odds are clearly stacked (sometimes overwhelmingly) against enforcers nowadays. Does this mean we should reverse them so as to make enforcement as frictionless as possible?

Doing so would surely signal resolve on the part of our decision-makers to get the job done. The move has political upsides as well, given that popular support for antitrust intervention against powerful platforms seems to be on the rise.[13] As history's most resolute trustbuster once bemoaned, output legitimacy is something the policy cannot do without.[14] Still, treading this path comes with a cost: antitrust amputated of

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12 ibid 2302 (Breyer dissenting). Briefly, the majority required evidence of *actual* increases in the "net price" of credit-card transactions (ie the joint price paid by merchants *and* consumers) or of *actual* decreases in the number of credit-card transaction (ie "net output", which accounts for demand by merchants *and* consumers of credit-card services). But, for one, assuming the District Court's unchallenged findings could indeed be ignored, how then can increases in the "net price" be objectively established? After all, the price on the consumer side is negative – consumers receive perks for using credit-cards – which means its valuation is a matter of subjective preferences. For another, as Justice Breyer noted in his dissent, 'because the relevant question is a comparison between reality and a hypothetical state of affairs, to require actual proof of reduced output is often to require the impossible'.

13 *See* Greenwood (2019).

14 *See* Arnold [1949] 689, 690 ('Unfortunately, all antitrust law enforcement under any plan depends on the public attitude.')

many of its rule-of-law checks. There is thus a case for favouring a more reasonable approach to enforcement, one which is fundamentally about coherence and entails:

— (i) setting enforcement standards in line with the chosen policy lodestar;

— (ii) seriously discussing the forms of economic power antitrust can, and should, deal with; and

— (iii) abiding by antitrust's essential role in a market economy given its proscriptive nature, namely that of a (chiefly) regulat*ive* (not regulat*ory*) policeman.

One must not forget, moreover, that resolute enforcement does not guarantee effective redress. It can even deflect attention from what may be the crux of many platform-to-provider cases: *outcome* fairness. Consider the idea of firewalling Amazon to remedy its (alleged) data-twinking tendencies. When it released its Echo Show product in 2017, Amazon was accused of having data-twinked the product developed by Nucleus, a start-up it had poured money into through its investment arm, Alexa Fund. Following the incident, it was reported that 'Alexa Fund representatives called a handful of its portfolio companies to say a clear "firewall" exists between the Alexa Fund and Amazon's product development teams.'[15] Yet, while the platform vowed compliance, it also allegedly conditioned investments in these start-ups on close cooperation with its own product teams.[16] So much for effective redress. Worse still, what if the real issue is not data-twinking, but free-riding? Unlike the former, the latter, as we have seen, has little to do with "competition". It rather relates to a perceived unfairness in *providers' outcomes*. Whether or not this situation should be allowed to endure, however, is something societies ought to decide for themselves. And for those

15 *See* Kim (2017).
16 ibid.

that do choose to act, (amended or new) regulation should be the answer, not antitrust.

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Upstream platform power plays create a Procrustean dilemma for antitrust. The intended meaning of the metaphor becomes apparent once the myth of Procrustes is recalled. Procrustes (according to Apollodorus) was the cruel owner of a small estate located on the hills of Attica. There, he would cater to footsore wayfarers with his "particular" brand of hospitality. To wit, force travellers into one of two beds; hammer out shorter individuals until they fit the longer bed; lop the taller to match the shorter one. Faced with our upstream concerns, though, Procrustes would probably lose the plot. Indeed, do platform abuses against providers overextend antitrust, or do they instead reveal the need for a policy stretch? Either way, by how much? As we have seen, the answer to these questions turns on beliefs regarding both the nature of the antitrust apparatus and the lodestars which should guide its application.

With this in mind, let us offer three prolonging final reflections.

Section 2. Final reflections

- Antitrust and change

According to one eminent scholar, the ongoing platformization and, more generally, digitization of our world have pushed antitrust into a '"liminal" moment, a period of transition during which the normal limits to thought, self-understanding and behaviour are relaxed, opening the way to novelty and imagination, construction and destruction.'[17] There are unfortunately reasons to be doubtful.

Many are undeniably striving to further our economic understanding of how

[17] Lianos [2019] 643, 643.

these businesses work to refine the analytical frameworks we currently rely upon. There is likewise considerable advocacy pressing for paradigmatic change. Yet, what is fundamentally new and constructive? Most observers still look at platforms with the assumption that competition is purely horizontal; this is the only reason they take interest in some upstream-facing power plays (namely, the ones involving suppliers with whom powerful platforms also compete horizontally within the digital infrastructures they run). Similarly, those who claim antitrust should be sensitive to the misfortune of, say, Uber drivers and Amazon merchants are more forthcoming with objections to the current approach than they are regarding their alternative.

The reality, then, is that antitrust is maybe not traversing a true liminal moment. For how can the "normal limits to thought, self-understanding and behaviour" be relaxed when there is so much partisanship and suspicion running through the antitrust community at present? Independent academics are routinely admonished and suspected of offering their opinions to bribes nowadays. Not for the perhaps unsustainable and/or uncritical nature of their arguments, mind you, but merely because they do not agree with a particular "camp". It is as if antitrust debates over powerful platforms have to be binary – with or against them. To borrow again from Keynes, what platform discussions really reveal is rather that '[t]he difficulty lies, not in the new ideas, but in escaping from the old one, which ramify, for those brought up as most of us have been, into every corner of our minds'.[18]

- Antitrust and problem-solving

The theories and arguments advanced in this thesis are complex. They will doubtless have disappointed staunch platform advocates and critics alike.

[18] Keynes (2018) vii.

The former would probably not take issue with complexity as such. Rather, they would likely reject the alternative approach articulated herein by portraying the lengthy excursions into political philosophy it requires as metaphysical gibberish. The reason? Presumably, a desire for scientific "hardness" in antitrust's methodology, an ambition shared with the mainstream economist whose expertise is viewed as paramount.

Scientific disciplines, we are often told, are to be fitted within a "hard-soft" hierarchy continuum, with physics at the top, and fields like philosophy or sociology at the bottom.[19] And when it comes to the social sciences, economics reigns supreme (at least, many economists see it that way).[20] Unsurprisingly so, one should add, since the "hard-soft" classification is a matter of disciplinary precision, which economics certainly does possess due to its powerful analytical tools.

My rebuttal, though, is not to say there should be less economics in antitrust analysis; on the contrary, there should be more. The riposte is instead to stress that foreclosing insights from other, "softer", intellectual disciplines (such as political philosophy) in the name of scientific hardness is a misguided approach to problem-solving. Economics's supremacy claim is itself quite shaky anyway: dollar calculations of economic welfare certainly are value-free; yet, as we have seen, they only acquire significance when one makes normative judgements regarding what welfare means, whose welfare counts and for what reasons. Furthermore, sealing antitrust to all but lawyers and the *mainstream* economists advising them is also costly. Take it from Nobel economist George Akerlof who recently bemoaned the "sins of omission" many in his profession commit due to their obsession with economics's place in the scientific hierarchy.[21] Important topics, he argues, are being dismissed or under-explored. Why?

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19 *See* Cole [1983] 111, 112ff.

20 Fourcade, Ollion and Algan [2015] 89 (analyzing the dominance of economics within the US social sciences network).

21 Akerlof [2020] 405.

Because they are harder to fit into a precise model, require the development of new analytical tools, and/or cannot be tested according to prevailing methodologies.[22] This sounds eerily familiar. Provider harm (be it through innovation-inhibiting profit squeezes, restrictions of freedom or of EOp) and non-market power forms of economic power: these are issues mainstream antitrust economics has tended to ignore. They need not be, though.

Consider the "competitive process" paradigm. Assuming we all accepted that antitrust's methodology *must* be "hard", there would still be no reason to dismiss it outright. The rich literature pioneered by the likes of John Roemer and Mark Fleurbaey shows us how even a value like EOp can be modelled with mathematical precision.[23] More fundamentally, however, given the impressive number of Nobel economists who have contributed to debates over the ethics of competition,[24] it is perhaps the antitrust expert who should be better versed in the techniques of ethical analysis.[25]

Now, disappointed detractors will likewise be critical of (some of) the arguments advanced in this thesis. Unlike die-hard platform defenders, they would probably object to all the added complexity, which does hinder swift problem-solving.

Take our discussion of free-riding. A lot was written to articulate what is effectively a basic idea. That is, fears borne from scraping and Sherlocking should, in most jurisdictions, not be addressed through antitrust because they are not really (or at least not primarily) about competition, although one can make them out to be. Some will no doubt read stubborn rigidity into the complex arguments supporting this claim.

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22 ibid 406, 408.

23 For a non-technical survey, *see* Trannoy (2016). *See* also Ferreira and Peragine (2016).

24 Among others, think of Arrow, Buchanan, Coase, Harsanyi, Hayek, Kahneman, Friedman, Samuelson, Sen, or Stiglitz.

25 Lionel Robbins (the famed economist who invented the "positive-normative" distinction in economics while rejecting the idea that economists should study the latter) acknowledged that '[positive] economics alone is a very imperfect education.' (Robbins (1984) xxxvi)

Why? Presumably because, for them, '[w]hether the juridical basis of an action for misappropriation be a proprietary right or a matter of conscience, little turns on the underlying theory. Whatever its theoretical basis the business values it should protect are clear.'[26]

This argument is surely attractive as it supports an appealing idea. Prosaically, the latter posits that if there is a "problem" antitrust can attend to more swiftly and with more bang-for-buck than existing alternatives, one should not hesitate to pull the trigger. The argument also does have the benefit of simplicity. And everyone can agree that '[i]n an area of the law that has become increasingly more complex and difficult for nonexperts to understand without spending hundreds of thousands of dollars on attorneys and economists, simplicity deserves more respect.'[27] There is, after all, a widely shared assumption, often expressed by reference to the well-known "razor of Occam", that simplicity is a theoretical virtue.[28] However, Occam's razor comes in many shapes. To me, the one commonly attributed to Albert Einstein strikes the right balance: "everything should be made as simple as possible, but not simpler".[29] So when a "problem" and its solution are not self-evident, it is wrong to depict them as if they were, which is precisely what such an argument does.

Cynics might, of course, accuse me of finessing into complexity a particular brand of conservative ideology. Problem-solving is unquestionably stymied when antitrust enforcement is required to be coherent or when democratic reform is touted over unreasonable trustbusting. Yet, these impediments, we have seen, inhere the rule of law itself. Its defence, to my mind, is not a prerogative of conservatives. For antitrust

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26 Terry [1988] 296, 312 (albeit in the context of an unfair competition law discussion).

27 Brennan [2014] 827, 852.

28 *See* generally Baker (2016).

29 Einstein [1934] 163, 165 ('It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience.')

is *law*, first and foremost. And as Commissioner Vestager stated, this means 'there are some corners that we just can't cut.'[30]

- A roadmap to sustainable platform capitalism

Capitalism, according to historian Donald Sassoon, has no real alternative;[31] survival is actually its *raison d'être*.[32] Capitalism's triumph, though, was never preordained, nor is its continued existence. To function properly, the system needs 'a supportive infrastructure and a wide consensus around itself that the capitalists themselves, often forced to think for the short term, could not possibly achieve on their own.'[33] The market economy, in other words, only thrives when everyone has a stake in its development, which in turn must deliver on the ideological promise underlying it: progress.[34]

Platform capitalism is no different. Its advent – a response to anxieties triggered by the 1970s downturn and compounded by both the dotcom bubble explosion and the Great Recession[35] – is just another step in the system's perpetual mutation. Like its predecessors, platform capitalism came with a promise of progress, which has undeniably been met for many, including platform-providers. For example, Apple-funded research shows that the App Store generated $519 billion worth of sales in 2019, of which more than 85% accrued to third parties rather than the platform.[36] And while sceptics will question the findings, there are *independent* studies to support the claim that, on the whole, platformization has been more a boon than a bane so far.[37] Yet, many

30 Vestager (2020).
31 Sassoon (2019).
32 ibid 506 ('Capitalism's only criterion of success is its own survival').
33 ibid xxxi.
34 ibid xxxviii.
35 *See* Srnicek (2017) ch 1.
36 *See* Borck, Caminade and von Wartburg (2020).
37 *See* Rivares and others (2019) (finding that platform developments tend to have positive or neutral effects on providers' productivity); Schwellnus and others (2019) (finding that, overall,

suppliers have become disillusioned. This was perhaps predictable. As one observer puts it, 'it's not hard to understand the resentment towards a [platform] that delivers you a bunch of business, but also takes a big chunk of your money, sets rules that can seem arbitrary and grows more powerful because of your work.'[38] What was evidently unfair to Karl Marx apparently still rings true today: 'in all spheres of social life the lion's share falls to the middleman.'[39]

For sure, one needs to keep in mind that many of platform capitalism's discontents are themselves platforms and first-order intermediaries, not actual producers. Disintermediated middlemen will always cry foul so we must remain cautious. Yelp, for instance, puts a lot of effort into blaming Alphabet/Google for its shortcomings to coax antitrust agencies into action – it once purchased a $3,000 toy elephant at a charity auction only because Commissioner Vestager had knitted it;[40] Yelp's own investors, though, point the finger at management for its travails.[41]

Nonetheless, the answer to the losers of the platformized market economy is not to say "society does not look a gift horse in the mouth"; "all intermediaries are evil anyway"; or, "the consumer is the only true arbiter of the entire system".

Capitalism (as noted a few paragraphs earlier) only triumphed when it became a collective project. And we need not ascertain its promise of progress only by reference to the quantifiable prosperity generated. Progress is also delivered through human flourishing, which seems to be currently best approximated by the notion of well-being.[42] On this front, platform capitalism is evidently failing. Far from the sense of

labour platforms have positive employment effects and insignificant consequences on dependent employment and wages).

38 Ovide (2020).

39 Marx (1990) 907 (n 3).

40 Braithwaite (2019).

41 ibid.

42 *See* VanderWeele [2017] 8148.

belonging and esteem one would expect to see in flourishing capitalist societies, there is considerable isolation and humiliation on the supplier side.[43] How could it be otherwise when the system, as presently structured, is based upon a coalition between platform founders, their patient investors and many unwitting consumers, which leaves out the producers and workers without whom there would be no value proposition to begin with?[44] Simply stated, platform capitalism is on an unsustainable path because it is morally bankrupt. It need not be, but the solution is multi-pronged and complex. What the appropriate response should be is a matter for others. Yet, to my mind, it must involve the market, the State, and civil society itself.

The market because, as economist Paul Collier argues, '[t]he starting point for a new approach is to recognize that the role of the large corporation in society has never properly been thought through.'[45] Big business's decades-long adherence to the shareholder primacy gospel has undoubtedly contributed to the unethical platform capitalism we have today.[46] Alternatives, though, do exist.

Progressives like Trebor Scholz, but also pragmatists like Collier, to name a couple, have supported the idea of vesting ownership and control of firms with those who participate in the company and have direct interests in its performance, namely workers.[47] In fact, platform co-ops can already be found in a variety of forms. Think of:

— Fairmondo (the German co-op alternative to Amazon and eBay, which has a multi-stakeholder approach to distributing profits);[48]

43 *See* also Collier (2018) ch 2.
44 *See* similarly Rahman and Thelen [2019] 177.
45 Collier (2018) ch 4.
46 *See* Indap (2018).
47 *See* Scholz (2017) ch 7, sections 4-7; Collier (2018) ch 4.
48 *See* Rustrum (2016).

— Resonate (the music streaming co-op challenger to Spotify and Apple Music that shares 45% of its profits with artists);[49]

— Stocksy (the co-op equivalent to Google Images or Getty Images, which gives photographers 50 to 75% of every licence sold);[50] or

— Braintrust (the community-governed labour platform which is rivalling incumbents like Upwork or TaskRabbit by combining low fees and blockchain technology).[51]

Platform cooperativism, therefore, is one worthy option. So much so, *en passant*, that the French government recently announced plans to develop a booking platform in cooperation with the tourism industry to compete with the likes of Airbnb and Booking Holdings.[52]

And beyond corporate governance, the market has to update its business ethos. Platforms, as any undertaking, must have a sense of purpose. The latter, however, need not be profits, nor does it only have to be about servicing the disadvantaged or producing products that deliver large positive externalities. Take it from philosopher Elizabeth Anderson, who argues that we can theorize the ethical business as 'a "nexus of reciprocal relationships" with internal and external stakeholders.'[53] Under this model, the for-profit corporation defines its mission 'in a way that incorporates the positive good of all stakeholders, and focus primarily on achieving that mission by following through on the teamwork and contractual and extracontractual commitments that make that achievement sustainable over time.'[54] Platforms must, accordingly, re-

49 *See* Morrison (2018).
50 *See* Pratka (2018).
51 *See* Robert (2020).
52 *See* De Beaupuy (2020).
53 Anderson (2015) 191.
54 ibid 200-201.

embrace what platform capitalism was meant to be: a competitive partnership.

In September 2019, some of the world's largest firms, including platforms like Amazon, acknowledged this reality by publicly reneging on the long-held view that maximizing shareholder benefits is the singular corporate objective. In signalling what is a potential paradigm shift in corporate culture, these firms vowed, among other things, to deal 'fairly and ethically with […] suppliers.'[55] But chanting "Kumbaya" will not suffice; the State must then be there to hold them to their word.

Antitrust is one important lever through which governments can do their part. This thesis has nevertheless hopefully shown that, although applying the instrument reasonably is the way to go, its reach and effectiveness will forever be limited. Not that antitrust enforcement should not be envisaged at all; quite the contrary. Reasonable interventions can still be significant; just constrained by rule-of-law safeguards. Furthermore, antitrust's insuperable limits may serve as an impetus for reform in different areas of action which really should take centre stage when it comes to dealing with some platform-provider issues. IP and labour laws were mentioned, but other obvious examples are merger control and taxation. Major obstacles no doubt abound. Still, these are not necessarily insurmountable even when geopolitical protectionism is accounted for.[56]

Despite this, as Commissioner Vestager rightly pointed out, 'there's only so much these existing powers can do. We also need new ways to tackle the problems that digitisation causes. And one part of the answer could be new regulatory rules.'[57]

The regulatory enterprise is admittedly often loathed nowadays. While justified in some respects, such disdain is nonetheless paradoxical: even the Gilded Age "robber

55 Business Roundtable (2019).
56 *See* Fleming and others (2020).
57 Vestager (2020).

barons" *welcomed* it for railways.[58] History, though, is only useful when the proper insights are drawn from it. And to me, these are that platform capitalism needs both an active, yet more *maternalistic* State, and the market, 'but harnessed by a sense of purpose securely grounded in ethics.'[59]

Civil society, finally, has an important role to play in this regard. To be sure, capitalism 'has no purpose except to keep the show going.'[60] It is, to reuse a familiar notion, a "spontaneous" system.[61] Yet, the institutions that together mould and support capitalism – at a bare minimum, property and competition – can be, and (in most liberal democracies) probably are, individually *ordered* (that is, shaped by intentional societal decisions). Hence, to borrow from Maurice Stucke and Ariel Ezrachi, 'while we think we are powerless to stop the toxic [platform capitalism], that's not true. We can take a stand.'[62]

Antitrust laws, for example, can be reformed to reflect a new collective vision about how competitive outcomes should be structured. However, if we genuinely do want a marketplace where success is more tied to effort than it is today or one which accords more importance to diversity per se, then we need 'to tell our elected officials […] and vote for those who want to enact change'.[63]

Change, moreover, is not merely a matter of civil society exercising its citizenry rights. It is also a question of conscience. Ethical alternatives to some of the most powerful platforms, we have seen, already exist. Together, the citizen-voter and the citizen-consumer can thus make the choice a more credible reality because even the

58 *See* Sassoon (2019) 232-233.
59 Collier (2018) ch 1.
60 Robinson (1971) 143.
61 Hayek (1988) 6.
62 Stucke and Ezrachi (2020) ch 10.
63 ibid.

Googles of the world are probably *not* natural monopolies.[64] So, there is room for more than one platform per niche in the long-run. More fundamentally still, maybe societies-as-consumers need to change *how* they consume. For if a platform like Amazon should be called out for some of the certainly unreasonable demands it places on its workers and providers, one must appreciate the paradox that arises when we, consumers, double down on the platform during a pandemic but then throw an unprecedented tantrum when deliveries are delayed or not up to usual standards.[65] The cruel irony with platform capitalism is perhaps that its sustainability is also threatened by what makes it prima facie so appealing to us as consumers: the great enabler of hyper-consumption[66] imperilled by hyper-consumption; or, as Shakespeare would have said, platform capitalism '[c]onsumed with that which it was nourished by.'[67]

64 *See* CMA (2020b) Appendix D, paras 76ff; *see* also Ducci (2020) (finding that e-commerce marketplace and, to a certain extent, ride-hailing platforms are not natural monopolies, though a contrary conclusion is reached for general search).

65 *See* Green (2020) (reporting on Amazon shoppers complaining at record levels during the spring of 2020).

66 *See* Ritzer and Miles [2019] 3 (arguing that platforms 'further enshrine and supercharge the process of "hyperconsumption"').

67 Shakespeare and Burrow (eds) (2002) 527.

APPENDICES

Appendix A. Platform economy diagnosis in policy reports

	Findings	Inquiry scope	Concentration	Causes of concentration										Urgent need for intervention		Type of intervention			
		Note: to the extent inquiry somehow covers upstream concerns		**Online intermediation trend**		**Network effects**		**Data-driven competitive advantages**		**Economies / advantages of scale &/or scope**		**Other**				**Antitrust**		**Regulation (existing, amended &/or new) (incl. "co-regulation")**	
EU	**EC SWD(2018) *[P2B regulation IA]***	Online search / marketplace / app stores/social media	✓	Generic (p.23-24)	✓	(p.21-23)	✓	(p.23-24)	✓	(p. 24)	✓	(p. 23-24)	✓	(p.26)	✓	Generic (p.10, 30)	✓	Secondary tool (p.3)	✓	Co-regulation (p.76ff)
EU	**EC SWD(2016) *[Copyright Directive IA]***	Creative / press publishing industries	Δ		Δ		Δ		Δ		Δ		Δ		✓	Generic (p.143-144, 10-161)	✓	Secondary (p.161)	✓	Bolstered copyright regulation (p.155, 173, 192)
EU	**Crémer et al (2019) *[Report for EC]***	Generic	✓	Generic (p.19, 23)	Δ		✓	(p.20-23, 31)	✓	(p.24, 31)	✓	(p.20, 33)	✓	(p.29, 33-34)	✓	Generic (p.42, 51)	✓	Primary tool (p.14, 53)	✓	New regulation (targeted where necessary: p.52-53, 70-72)
UK	**CMA (2020b) *[Online advertising market study final report]***	Online search / advertising, social media	✓	Generic (§2.10 + box 2.2); [online] search/advertising, social media (§3.17-3.23, 3.165-3.173, 5.46, 5.131-5.132, 5.215, 5.218, 5.222, 5.227)	Δ		✓	(§2.10 + box 2.2, §3.59ff, 3.158ff, 5.154)	✓	(§2.10 + box 2.2, §3.64ff, 3.236ff, 5.60-5.62, 5.127, 5.145, 5.162-5.168, 5.268)	✓	(§2.10 + box 2.2, §3.57ffn 5.46ff)	✓	(§2.10 + box, ch 3 & 5)	✓	[Online] search/advertising, social media (p.322, §8.4, 8.260, 9.16)	✓	Secondary tool (§7.35ff)	✓	New (co-) regulation (§7.14ff)
UK	**CMA (2017) *[DCT market study report]***	DCTs in car / home insurance, energy, broadband, flights, credit cards	✓	Some DCT sectors (p.20-21)	Δ		Δ		Δ		Δ		✓	Paper E (§2.42-2.58)		Not generally for antitrust (§5.29)	✓	Default (§5.2, 5.28-5.30)	✓	Bolstered sector regulations + clarified consumer protection law (§5.2, 5.3-5.20) + Paper C)
UK	**HoL (2019) *[Regulating in a Digital World report]***	Generic	✓	Generic (§160); online advertising (§129)	Δ		✓	(§130-138 *juncto* 139)	✓	(§131)	Δ		✓	(§132, 143-144)	✓	Generic (§232, 240)	✓	Secondary tool (§232-233)	✓	New coordinated cross-sectoral regulation (§172, 233, 2.38-2.39)
UK	**HoL (2016) *[Platforms & the DSM report]***	Generic	✓	Generic (§100)	Δ		✓	(§73, 100)	✓	(§68-69)	✓	(§89)	✓	(§101)	✓	OTA sector (§123)	Δ	Default (?)	✓	Co-regulation (§133) but sceptical about new top-down regulation (§103, 276)
UK	**Furman et al (2019) *[Report for UK Gov]***	Generic	✓	Generic (p.4, §1.30-1.31); [online] search/advertising, marketplaces, social media, mobile OS, app stores (§1.42-1.61, 1.100-1.117)	Δ		✓	(p.4, §180-1.88)	✓	(p.4, §1.37-1.41, 1.71-179)	✓	(p. 4, §1.68-1.170)	✓	(§1.87-190)	✓	Generic (§2.131, 3.111, 3.118) online advertising (§3.197)	✓	Secondary tool (§2.8, 2.12, 2.18-2.23, 2.1313.115)	✓	New/existing regulation (incl. targeted co-regulatory elements) (ch.2, §3.152)

Findings		Inquiry scope	Concentration		Causes of concentration										Urgent need for intervention		Type of intervention			
		Note: to the extent inquiry somehow covers upstream concerns			Online intermediation trend		Network effects		Data-driven competitive advantages		Economies / advantages of scale &/or scope		Other				Antitrust		Regulation (existing, amended &/or new) (incl. "co-regulation")	
DE	**BMWi (2019a) *[Competition 4.0 report]***	Generic	✓	Generic (p.17, ,22, 49)	✓	(p.23)	✓	(p.16-17, 22, 49)	✓	(p.18, 49)	✓	(17-18, 22)	✓	(p.17-20)	✓	Generic (p.24)	✓	Secondary tool (p.51)	✓	New regulation (p.25-26, 51-52)
DE	**BMWi (2019b) *[Draft ARC amendment]***	Generic	✓	Generic (p.73)	✓	(p.69)	✓	(p.73)	✓	(p.73)	✓	(p.73)	✓	(p.74)	✓	Generic (p.1)	✓	Bolstered (p.8-9, 70-72) + special regime (p.4, 8-9, 74-78)	✓	Bolstered SBP law (p.9, 78-84)
DE	**Schweitzer et al (2018) *[Report for BMWi]***	Generic	✓	Generic (p.12)	✓	(p.7-10, 66)	✓	(p.12)	✓	(p.12)	✓	(p.12)	✓	(p.11-14)	✓	Generic (p.166-167)	✓	Default (p.165)	✓	Existing unfair competition/SBP/consumer protection/contract laws (p.106-107,118, 165)
FR	**ADLC (2020) *[Antitrust & digital issues paper]***	Generic	Δ		Δ		Δ		Δ		Δ		Δ		✓	Generic (p.2)	✓	But unclear whether proposed preventive system would be part of reformed antitrust or new (co-) regulation (p.7-9)	✓	If proposed preventive system established through new (co-) regulation (p.7-9)
FR	**ADLC (2018) *[Online advertising opinion]***	Online search / advertising, social media	✓	[Online] search/mapping, social media, email, app stores, browsers, video sharing (§203-212)	Δ		✓	(§114, 228)	✓	(§137-138)	✓	(§227)	✓	(§115, 119-124, 139-148)	Δ		Δ	Default (?)	✓	Bolstered regulation (§262, 305)
FR	**Senate (2019) *[Digital sovereignty report]***	Generic	✓	Generic (p.29) [online] search/advertising, social media, mobile OS, browsers, ecommerce, cloud (p.32-33)	Δ		✓	(p.30-31)	✓	(p.29)	✓	(p.30-31,33)	✓	(p.33)	✓	Generic (p.8, 30, 38)	Δ	Default (?)	✓	New regulation (p.46)
FR	**ESEC (2019) *[Digital sovereignty report]***	Generic	✓	Mobile OS, browsers, online search (p.5)	Δ		Δ		Δ		Δ		Δ		Δ		✓	Secondary (p.24)	✓	Bolstered regulation (p.25-27, 29-32) + new regulation (p.27-28)
FR	**IGF & CGE (2019) *[Report for FR Gov]***	Generic	✓	Generic (p.18)	Δ		✓	(p.18)	✓	(p.18)	✓	(p.18)	✓	(p.18)	Δ		✓	Secondary (p.21)	✓	New regulation (p.21)
FR	**Parliament (2015) *[Freedoms in the digital age]***	Generic	✓	Generic (p.200)	Δ		✓	(p.200)	✓	(p.200)	✓	(p.200)	✓	(p.200-201)	Δ		✓	Default (p.225)	✓	Bolstered unfair competition/SBP/consumer protection laws + new regulation (218, 225)

Findings		Inquiry scope	Concentration		Causes of concentration										Urgent need for intervention		Type of intervention			
		Note: to the extent inquiry somehow covers upstream concerns			Online intermediation trend		Network effects		Data-driven competitive advantages		Economies / advantages of scale &/or scope		Other				Antitrust		Regulation (existing, amended &/or new) (incl. "co-regulation")	
	Council of the State (2014) ***[Fundamental rights in the digital age]***	Generic	✓	Generic (p.106)	Δ		✓	(p.106)	✓	(p.106)	✓	(p.106)	Δ		Δ		✓	Secondary (p.222-223)	✓	New regulation (p.223)
	CNNum (2015) ***[Digital Ambition report]***	Generic	✓	Generic (p.7)	Δ		✓	(p.7)	✓	(p.8-9)	Δ		✓	(p.59)	Δ		✓	Default (p.59)	✓	Unfair competition/SBP laws (p.59, 72) + new regulation (p.36)
	CNNum (2014) ***[Platform Neutrality report]***	Generic	✓	Generic (p.42, 90)	✓	(p.69)	✓	(p.43, 64)	✓	(p.77-82)	Δ		✓	(p.43)	Δ		✓	Default (p.28-29)	✓	Unfair competition/SBP laws (p.29) + bolstered consumer protection law (p.30) + new co-regulation (p.30-31)
NL	**ACM (2019)** ***[Mobile app store market study]***	App stores	✓	App stores (p.15)	✓	(p.15)	✓	(p.34)	Δ		Δ		✓	(p.52-56)	✓	App stores (p.106, 108)	✓	Default (p.17)	✓	Consumer protection law (p.17) + (co-) regulation (p.108)
PT	**AdC (2019)** ***[Digital issues report]***	Generic	✓	Generic (§20)	✓	(§1-9)	✓	(§20, 74, 79-82)	✓	(§21, 96)	✓	(§74, 76-79, 96)	✓	(§74, 83, 96)	Δ		Δ	Default	Δ	
AU	**ACCC (2019a)** ***[Platforms inquiry final report]***	Online search / advertising, social media, news referral	✓	Online search/advertising, social media (p.65, 78, 94, 99)	✓	(p.44-46)	✓	(p.8-9, 44, 66-67, 79, 96, 99)	✓	(p.8-9, 12 84-89)	✓	(p.8-9, 46, 73-74, 79-80)	✓	(p.8-9, 44, 68-75, 80)	✓	Generic (p.27, 140)	✓	Secondary (p.139-140)	✓	Existing consumer protection law (p.139-140) + new ASBP, media, tax (co-) regulation (p.141, 255ff, 199, 329ff) + markets (p.150)
JP	**JFTC (2019)** ***[P2B report]***	e-commerce marketplaces / app stores	✓	E-commerce/app stores (p.7, 22)	✓	(p.15-16, 19)	✓	(p.6-7, 22)	✓	(p.7)	Δ		✓	(p.7)	✓	E-commerce marketplace/app stores (p.9)	Δ	Default (?)	✓	Unfair competition/SBP law (p.12, 33, 38, 40, 44, 45, 51, 53, 56, 77) + regulation (p.11, 107)
	Study Group (2018) ***[platforms interim paper]***	Generic	✓	Generic (p.2-3)	✓	(p.1)	✓	(p.2)	✓	(p.2)	Δ		✓	(p.2)	✓	Generic (p.13)	✓	Default (p.13)	✓	Co-regulation (p.8)
IN	**CCI (2020)** ***[e-commerce market study]***	e-commerce	✓	E-commerce (goods marketplaces; OTAs: §49-50)	✓	(§12ff, 34)	✓	(§49)	Δ		Δ		✓	(§51)	✓	E-commerce (84-85, 87, 92, 98, 106, 109)	Δ	Default (?)	✓	Self-regulation (§113)

Findings		Inquiry scope	Concentration		Causes of concentration										Urgent need for intervention		Type of intervention			
		Note: to the extent inquiry somehow covers upstream concerns			Online intermediation trend		Network effects		Data-driven competitive advantages		Economies / advantages of scale &/or scope		Other				Antitrust		Regulation (existing, amended &/or new) (incl. "co-regulation")	
BRICS	**BRICS Centre (2019)** ***[Digital competition report]***	Generic	✓	Generic (p.254); online search/advertising, social media & several others (925, 968, 871, 1022-1024, 1089-1093)	✓	(p.369, 546)	✓	(p.254, 1267)	✓	(p.552, 1224)	Δ		✓	(p.1268-1269, 1280-1286)	✓	Generic (p.224)	Δ	Default (?)	✓	New/existing (co-) regulation (p.355-359, 456)
OTHER	**IMF (2019)** ***[World Economic Outlook report]***	Generic	✓	Generic (p.57)	Δ		Δ	(p.57)	Δ	(p.57)	Δ		Δ		✓	(p.69)	✓	Default (p.69)	✓	Taxation (p.69)
	UNCTAD (2019a) ***[Competition issues paper]***	Generic	✓	Online search / advertising / e-commerce (p.3-4)	Δ		✓	(p.4)	✓	(p.4)	Δ		✓	(p.4-5)	✓	Generic (p.5, 14-15)	Δ	Default (?)	✓	New regulation (p.11-14)
	UNCTAD (2019b) ***[Digital economy report]***	Generic	✓	Generic (p.83-84) e-commerce marketplaces (p.40)	✓	(p.25 ff)	✓	(p.84)	✓	(p.84)	Δ		✓	(p.84-88)	✓	Generic (p.148)	✓	Default (p.138)	✓	New regulation (p.140)
	German, French and Polish economic ministries (2019) ***[Modernising EU competition policy]***	Generic	✓	Generic (p.2-3)	Δ		Δ		Δ		Δ		Δ		✓	Generic (p.1)	✓	Default (p.2)	✓	New regulation (p.2)
	Stigler Committee (2019) ***[Platforms report]***	Generic	✓	Generic (p.7-8, 34)	Δ		✓	(p.7, 38-39)	✓	(p.7-8, 47-51)	Δ		✓	(p.8, 41-42)	✓	Generic (p.9, 81, 94)	✓	Default/secondary (p.89-90)	✓	New regulation (p.100-101, 188ff)
	BEUC (2019) ***[Competition policy in digital era report]***	Generic	✓	Generic (p.7)	Δ		✓	(p.6-7)	✓	(p.6)	Δ		✓	(p.7)	✓	Generic (p.8-9)	✓	Default (p.15ff)	✓	New regulation (targeted where necessary (p.24)

✓: claimed/suggested ✗: rejected Δ: not discussed/claimed or unclear

Appendix B. Concern for the upstream in policy reports

	Findings	Inquiry scope	Upstream focus						
			Explicit		Direct (ie not tied to or conditioned by consumer harm)		Influenced or driven by concern for unfair (?) value distribution towards providers		Exclusive or predominant (ie no or little focus on other platform-related issues/concerns)
EU	**EC SWD(2018)** ***[P2B regulation IA]***	Online search / marketplaces / app stores/social media	✓	(All)	Δ	(cf p.28-30 with p.29)	✓	(p.26-28)	✓
EU	**EC SWD(2016)** ***[Copyright Directive IA]***	Creative/press publishing industries	✓	(All)	✓	(p.142-143, 160-161)	✓	(p.143, 160)	✓
EU	**Crémer et al (2019)** ***[Report for EC]***	Generic	Δ	(p.41, 61)	✓	(p.41-42, 60-66)	Δ	(p.41, 61)	✗
UK	**CMA (2020b)** ***[Online advertising market study final report]***	Online search / advertising, social media	✓	(ch.5)	Δ	(cf §2.83-2.85, 3.143-3.144, 3.256; 5.372-5.373 + ch 6 with absence of actual evidence of consumer harm)	✓	(§6.28-6.29, 7.77 + Appendix S but note §7.79-7.80)	✗
UK	**CMA (2017)** ***[DCT market study report]***	DCTs in car / home insurance, energy, broadband, flights, credit cards	✓	(§4.90ff + Paper E (§3.1ff))	✗	(Paper E §3.12, 3.14, 3.34ff, 3.52)	Δ		✗
UK	**HoL (2019)** ***[Regulating in a Digital World report]***	Generic	✓	(§172)	✓	(§172)	Δ		✗
UK	**HoL (2016)** ***[Platforms & the DSM report]***	Generic	✓	(§81-83, 122, 126-128, 133)	✓	(§133)	Δ	(§126-128, 133)	✗
UK	**Furman et al (2019)** ***[Report for UK Gov]***	Generic	✓	(§1.134-1.152)	✗	(§1.134-1.152)	✓	(§1.137, 1.141-1147)	✗
DE	**BMWi (2019a)** ***[Draft ARC amendment]***	Generic	✓	(p.9, 69, 78)	✓	(p.69, 70-71, 76, 78)	Δ		✗
DE	**BMWi (2019b)** ***[Competition 4.0 report]***	Generic	✓	(p.50)	✓	(p.50)	Δ		✗
DE	**Schweitzer et al (2018)** ***[Report for BMWi]***	Generic	✓	(p.66-67, 70, 103-104, 113)	✓	(p.103-104, 113)	Δ		✗
FR	**ADLC (2020)** ***[Antitrust & digital issues paper]***	Generic	Δ		Δ		Δ		✗
FR	**ADLC (2018)** ***[Online advertising opinion]***	Online search / advertising, social media	✓	(§248-257)	Δ		✓	(§82)	✗
FR	**Senate (2019)** ***[Digital sovereignty report]***	Generic	✓	(p.34-35)	✓	(p.34-35)	✓	(p.40)	✗
FR	**ESEC (2019)** ***[Digital sovereignty report]***	Generic	✓	(p.9-11)	✓	(p.9-11)	✓	(p.9-11, 17-18)	✗
FR	**IGF & CGE (2019)** ***[Report for FR Gov]***	Generic	Δ		Δ		Δ		✗
FR	**Parliament (2015)** ***[Freedoms in the digital age]***	Generic	✓	(p.201)	✓	(p.201)	✓	(p.201)	✗
FR	**Council of the State (2014)** ***[Fundamental rights in the digital age]***	Generic	✓	(p.35-36)	✓	(p.35-36)	✓	(p.268)	✗
FR	**CNNum (2015)** ***[Digital Ambition report]***	Generic	✓	(p.58ff)	✓	(p.59ff)	✓	(p.8, 72)	✗

	Findings	Inquiry scope	Upstream focus						
			Explicit		Direct (ie not tied to or conditioned by consumer harm)		Influenced or driven by concern for unfair (?) value distribution towards providers		Exclusive or predominant (ie no or little focus on other platform-related issues/concerns)
	CNNum (2014) ***[Platform Neutrality report]***	Generic	✓	(p.66, 83-89, 104-106)	✓	(p.66, 83-89, 104-106)	✓	(p.38, 83)	✗
NL	**ACM (2019)** ***[Mobile app store market study]***	App stores	✓	(ch.4-6)	✓	(p.102-104, 106-107)	Δ		✗
PT	**AdC (2019)** ***[Digital issues report]***	Generic	✓	(§111)	✗	(§111-112)	Δ	(§97, 111-112)	✗
AU	**ACCC (2019a)** ***[Platforms inquiry final report]***	Online search / advertising, social media, news referral	✓	(ch.3, 5-6)	Δ	(cf p.12-13, 16,.134-138, 529-530 with 138-140)	✓	(p.16, 163, 225, 232, 235, 245)	✗
JP	**JFTC (2019)** ***[P2B report]***	e-commerce marketplaces / app stores	✓	(All)	✓	(All)	Δ		✗
	Study Group (2018) ***[platforms interim paper]***	Generic	✓	(p.9, 11)	✓	(p.9, 11)	Δ		✗
IN	**CCI (2020)** ***[e-commerce market study]***	e-commerce	✓	(All)	✓	(All)	✓	(p.13, 33, 38, 40-41, 44, 51, 56, 68, 71, 77)	✗
BRICS	**BRICS Centre (2019)** ***[Digital competition report]***	Generic	✓	(p.141, 194, 255, 260, 317, 359ff, 534-538, 549)	✓	(p.141, 174, 255, 260, 317, 359ff, 549)	✓	(p.51, 58, 97, 141, 174, 255, 260, 317)	✗
OTHER	**IMF (2019)** ***[World Economic Outlook report]***	Generic	✓	(p.57 (not platform conduct-specific))	Δ		Δ		✗
	UNCTAD (2019a) ***[Competition issues paper]***	Generic	✓	(p.7)	✓	(p.7)	✓	(p.7)	✗
	UNCTAD (2019b) ***[Digital economy report]***	Generic	✓	(p.38-40, 94, 97-99)	✓	(p.38-40, 94, 97-99)	✓	(p.38-40, 94, 97-99, 100)	✗
	German, French and Polish economic ministries (2019) ***[Modernising EU competition policy]***	Generic	Δ		Δ		Δ		✗
	Stigler Committee (2019) ***[Platforms report]***	Generic	✓	(p.61)	✓	(p.61)	✓	(p.36, 61, 68, 89, 115)	✗
	BEUC (2019) ***[Competition policy in digital era report]***	Generic	✓	(p.9)	✓	(p.9)	✓	(p.9, 13)	✗

✓: yes ✗: no Δ: not discussed/claimed or unclear

Appendix C. Enforcement standards in policy reports

	Findings	Inquiry scope	Type of liability test				Standard of proof	
			Rules (illegality by-object or per se)		Standards (illegality by likely or actual effects)		Lower than current standard	
EU	**EC SWD(2018)** ***[P2B regulation IA]***	Online search / marketplaces / app stores/social media	✓	Co-regulation (specific: p.76ff + art 3-11 of the Regulation)	Δ		Δ	
EU	**EC SWD(2016)** ***[Copyright Directive IA]***	Creative/press publishing industries	✓	Regulation (specific: 155, 173, 192 + art 15, 17 of the Directive)	Δ		Δ	
EU	**Crémer et al (2019)** ***[Report for EC]***	Generic	✓	Antitrust (generic: p.51, 71) (specific: p.51, 57-58, 66-67)	✓	Antitrust (MFN: p.57; multi-homing restrictions: p.57-58)	✓	Antitrust (p.42, 51)
UK	**CMA (2020b)** ***[Online advertising market study final report]***	Online search / advertising, social media	✓	(Co-) regulation (§7.83)	Δ		Δ	(Co-) regulation (Appendix U, §176-182)
UK	**CMA (2017)** ***[DCT market study report]***	DCTs in car / home insurance, energy, broadband, flights, credit cards	✓	Antitrust (wide MFN: §5.28 + Paper E §3.6-3.28)	✓	Antitrust (narrow MFN clauses: §5.29 + Paper C §3.29-3.88)	Δ	
UK	**HoL (2019)** ***[Regulating in a Digital World report]***	Generic	Δ		Δ		Δ	
UK	**HoL (2016)** ***[Platforms & the DSM report]***	Generic	Δ		✓	Antitrust (generic: §102) (MFN clauses: §122; vertical integration-related conduct: §155)	Δ	
UK	**Furman et al (2019)** ***[Report for UK Gov]***	Generic	✓	Regulation (generic & specific: §2.34-2.42, 2.46)	Δ		✗	Antitrust (§3.114)
DE	**BMWi (2019a)** ***[Competition 4.0 report]***	Generic	✓	Antitrust (but sceptical) &/or regulation (generic & specific) (p.25, 51, 53-54, 73)	✗	Antitrust &/or regulation (generic: p.25)	Δ	
DE	**BMWi (2019b)** ***[Draft ARC amendment]***	Generic	✓	Antitrust (specific: p.8-9, 75-78	Δ		Δ	
DE	**Schweitzer et al (2018)** ***[Report for BMWi]***	Generic	✗	Antitrust (p.127-128, 166-167); specific (p.111)	✓	Antitrust (p.127-128, 166-167); specific (p.111)	Δ	
FR	**ADLC (2020)** ***[Antitrust & digital issues paper]***	Generic	✓	Antitrust (?) or (co-) regulation (p.8)	Δ		Δ	
FR	**ADLC (2018)** ***[Online advertising opinion]***	Online search / advertising, social media	✓	Antitrust (generic: p.8)	Δ		Δ	
FR	**Senate (2019)** ***[Digital sovereignty report]***	Generic	Δ		Δ		Δ	
FR	**ESEC (2019)** ***[Digital sovereignty report]***	Generic	Δ		Δ		Δ	
FR	**IGF & CGE (2019)** ***[Report for FR Gov]***	Generic	✓	Regulation (p.22)	Δ		Δ	
FR	**Parliament (2015)** ***[Freedoms in the digital age]***	Generic	✓	Unfair competition/SBP laws (specific: p.215-216)	Δ		Δ	
FR	**Council of the State (2014)** ***[Fundamental rights in the digital age]***	Generic	Δ		Δ		Δ	
FR	**CNNum (2015)** ***[Digital Ambition report]***	Generic	✓	Antitrust (generic: p.69)	Δ		Δ	
FR	**CNNum (2014)** ***[Platform Neutrality report]***	Generic	✓	Antitrust (generic & specific: p.28-29)	Δ		Δ	

	Findings	Inquiry scope	Type of liability test				Standard of proof	
			Rules (illegality by-object or per se)		Standards (illegality by likely or actual effects)		Lower than current standard	
NL	**ACM (2019)** ***[Mobile app store market study]***	App stores	Δ		Δ		Δ	
PT	**AdC (2019)** ***[Digital issues report]***	Generic	Δ		Δ		Δ	
AU	**ACCC (2019a)** ***[Platforms inquiry final report]***	Online search / advertising, social media, news referral	Δ		Δ		Δ	
JP	**JFTC (2019)** ***[P2B report]***	e-commerce marketplaces / app stores	Δ		Δ		Δ	
	Study Group (2018) ***[platforms interim paper]***	Generic	✓	Antitrust (?) (generic: p.13) &/or regulation (generic: p.12)	Δ		Δ	
IN	**CCI (2020)** ***[e-commerce market study]***	e-commerce	Δ		Δ		Δ	
BRICS	**BRICS Centre (2019)** ***[Digital competition report]***	Generic	✓	Antitrust (specific: p.581, 594, 599)	✓	Antitrust (generic: p.136-137)	Δ	
OTHERS	**IMF (2019)** ***[World Economic Outlook report]***	Generic	Δ		Δ		Δ	
	UNCTAD (2019a) ***[Competition issues paper]***	Generic	✓	Antitrust (?) &/or regulation (generic: (p.139)	Δ		Δ	
	UNCTAD (2019b) ***[Digital economy report]***	Generic	✓	Regulation (specific: p.11-13)	Δ		Δ	
	German, French and Polish economic ministries (2019) ***[Modernising EU competition policy]***	Generic	✓	Antitrust (?) &/or regulation (p.2)	Δ		Δ	
	Stigler Committee (2019) ***[Platforms report]***	Generic	✓	Antitrust (p.95, 98) &/or regulation (p.115-116)	✓	Antitrust (relaxed: p.96-98)	✓	Antitrust (p.95, 98-99)
	BEUC (2019) ***[Competition policy in digital era report]***	Generic	Δ		Δ		✓	Antitrust (p.17)

✓: recommended ✗: rejected Δ: not discussed/claimed or unclear

Appendix D. Platform power in policy reports

Findings		Inquiry scope	Platform power															
			Systemic (strategic, structuring, critical, societal) power		Significant market power (dominant, preponderant, influential position)		Intermediary power		Relational power (SBP/economic dependence)		Ecosystem power		Regulatory power		Informational power			
															Insider's power		Panoptic power	
			Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance
EU	**EC SWD(2018)** ***[P2B regulation IA]***	Online search / marketplaces / app stores / social media	Δ	Δ	✗ (p.3)	✓ Antitrust (p.3)	✓ (p. 24-30)	Δ	✓ (p.23-24)	✓ Co-regulation (p.3, 10)	Δ	Δ	✓ Implicit in duty of care solutions	✓ Co-regulation (p. 3, 33, 77, 79)	✓ Implicit in transparency solutions	✓ Co-regulation (p.3, 33, 77-78)	Δ	✗
	EC SWD(2016) ***[Copyright Directive IA]***	Creative / press publishing industries	Δ	Δ	Δ	Δ	Δ	Δ	✓ (p.142, 160)	✓ Regulation (p.142, 160)	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	Crémer et al (2019) ***[Report for EC]***	Generic	Δ	Δ	✓ (p.48-49)	✓ Antitrust (p.46-50, 69-70)	✓ (p.13, 48, 64, 69-70)	✓ Antitrust (p.49, 69-70)	Δ	✓ Antitrust (if amounts to intermediation power)	Δ	✓ Antitrust (implicitly: p.48)	✓ (p.16, 60)	✓ Potentially antitrust if also dominance p.12, 62-63)	✓ (p.5, 6)	✓ Antitrust (if dominance) (p.64-65)	Δ	Δ
UK	**CMA (2020b)** ***[Online advertising market study final report]***	Online search / advertising, social media	✓ (§7.58-7.64)	✓ (Co-) regulation (§7.55ff)	✓ (ch.3, 5)	Δ Antitrust (default)	✓ (§3.47, 5.315)	(Co-) regulation as part of the SMS test (§7.56 + CMA (2019) interim report §6.30)	✓ (§5.362, Appendices P & S)	(Co-) regulation as part of the SMS test (Appendices P & S + CMA (2019) interim report §6.30)	✓ (§59)	(Co-) regulation (§7.65-66)	✓ (§52, 7.36)	✗ (Co-) regulation (§7.35-7.36)	✓ (§102, 5.331ff)	✓ (Co-) regulation (§7.74ff))	Δ	Δ
	CMA (2017) ***[DCT market study report]***	DCTs in car / home insurance, energy, broadband, flights, credit cards	Δ	Δ	Δ	Δ Antitrust (default)	✓ (§5.21)	Δ	✓ (§ 4.80 + Paper E §2.39-2.65)	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	HoL (2019) ***[Regulating in a Digital World report]***	Generic	✓ (§171)	✓ Regulation (§171-172)	✓ (§4, 121+ 129)	✓ Antitrust (§161)	✓ (§161, 171, 180)	✓ Antitrust (§161)	Δ	✓ Antitrust (if amounts to intermediation power)	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ

Findings		Inquiry scope	Platform power															
			Systemic (strategic, structuring, critical, societal) power		Significant market power (dominant, preponderant, influential position)		Intermediary power		Relational power (SBP/economic dependence)		Ecosystem power		Regulatory power		Informational power			
															Insider's power		Panoptic power	
			Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance
	HoL (2016) ***[Platforms & the DSM report]***	Generic	Δ	Δ	Δ	✓	✓	Δ	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
					Recommends further research (§102, 179) but seemingly assumes dominance (§153-154)	Antitrust (§179)	(§100)		(§83, 126-128, 133 + §82 + §122)	Co-regulation (§126-128 133)								
	Furman et al (2019) ***[Report for UK Gov]***	Generic	✓	✓	✓	✓	✓	✓	✓	✓	Δ	✗	✓	✓	✓	✓	Δ	Δ
			(§1.117)	Regulation (§2.10, 2.117)	(§1.30 + §1.42-1.61, 1.100-1.117)	Antitrust (§3.114)	(§1.117, 1.148, 1.161, 3.36, 3.26 + §1.55, 1.58)	Regulation (§2.10, 2.117) (no antitrust: §3.114)	(§1.135)	Regulation (§2.10, 2.117)		Antitrust (§3.114)	Implicitly: §1.117)	(Co-) regulation (if also strategic power) (§117) (?)	(Implicitly: §1.117)	(Co-) regulation (if also strategic power (?)) (§117)		
DE	**BMWi (2019a)** ***[Competition 4.0 report]***	Generic	Δ	✓	Δ	✓	✓	✓	Δ	✓	✓	✓	✓	✗	✓	Δ	Δ	Δ
				Regulation (p.52-53)		Antitrust (p.28-31) & regulation (p.52-53)	(p.16, 49-50)	Antitrust (p.31-32)		Antitrust (implicitly: p.28-31)	(p.28-31)	Antitrust (implicitly: p.28-31)	(p.50)	(not problematic as such: p.50)	(p.23)			
	BMWi (2019b) ***[Draft ARC amendment]***	Generic	✓	✓	✓	✓	✓	✓	✓	✓	Δ	Δ	Δ	Δ	✓	✓	Δ	Δ
			(p.4, 8-9, 74)	Antitrust (special rules: p.8, 74-75)	(p.73)	Antitrust (p.8, 69)	(p.69)	Antitrust (p.8, 69)	(p.69, 73)	SBP law (p.9, 78-80)					(p.71, 77)	Antitrust (if dominance (?) (p.71) or paramount power (?)) (p.77)		Antitrust (if dominance (?) (p.71) or paramount power (?)) (p.76)
	Schweitzer et al (2018) ***[Report for BMWi]***	Generic	Δ	Δ	Δ	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	Δ	Δ
						Antitrust (p.66-75, 77-78, 158)	(p.8, 66, 70)	Antitrust (p.66-75, 77-78, 158)	(p.56, 70, 73)	SBP law (p.9, 78-80)	(p.15-19)	Antitrust (p.84-89)	(p.8, 70)	Antitrust (p.70-71)	(p.42-43)	Antitrust (if SBP (?), intermediary power, dominance) (p.78, 110)		Antitrust (if dominance) (?) (p.114)

Findings		Inquiry scope	Platform power															
			Systemic (strategic, structuring, critical, societal) power		Significant market power (dominant, preponderant, influential position)		Intermediary power		Relational power (SBP/economic dependence)		Ecosystem power		Regulatory power		Informational power			
															Insider's power		Panoptic power	
			Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance
FR	**ADLC (2020)** ***[Antitrust & digital issues paper]***	Generic	Δ	✓	Δ	Δ	Δ	✓	Δ	Δ	Δ	Δ	Δ	✓	Δ	Δ	Δ	Δ
				Antitrust (p.5) or (co-) regulation (p.8)		Antitrust (default)		Antitrust (p.5) or (co-) regulation (p.8)						Antitrust (?) or (co-) regulation (p.8)				
	ADLC (2018) ***[Online advertising opinion]***	Online search / advertising, social media	Δ	✗	✓	✓	Δ	✗	✓	✗	Δ	✗	Δ	Δ	Δ	✓	Δ	Δ
				Antitrust (§190)	(§2, 96, 111, 113, 203-212, 215, 229-230 + p.101)	Antitrust (§190)		Antitrust (§190)	(§242-244)	Antitrust (§190)	(§114)	Antitrust (§190)			(§262)	Regulation (§262)		
	Senate (2019) ***[Digital sovereignty report]***	Generic	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	✓	✓	Δ	Δ
			(p.29 +(Annex 1)	Regulation (p.46-47)	(p.19, 30 + p.32-33)	Antitrust (default)									(p.48-49)	(Co-) regulation (p.48-49)		
	ESEC (2019) ***[Digital sovereignty report]***	Generic	✓	Δ	✓	Δ	✓	Δ	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
			(p.6)		(p.5)	Antitrust (default)	(p.9-10)		(p.9-10)									
	IGF & CGE (2019) ***[Report for FR Gov]***	Generic	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
			(p.19)	Regulation (p.21)	(p.18 + p.19)	Antitrust (default)									(Implicitly : p.19?)			
	Parliament (2015) ***[Freedoms in the digital age]***	Generic	✓	✓	✓	Δ	✓	✓	✓	✓	Δ	Δ	✓	✓	✓	✓	Δ	Δ
			(p.197)	Regulation (p.222-223) not antitrust (p.211-212)	(p.200)	Antitrust (default)	(p.201-203)	Unfair competition/SBP laws (p.215)	(p.201)	Unfair competition/SBP laws (p.215)			(p.201-202)	Antitrust (if dominance)/unfair competition/SBP laws (if SBP) (p.208ff)	Implicit in recommended transparency solution	Consumer protection law (p.216); Regulation (p.224)		
	Council of the State (2014) ***[Fundamental rights in the digital age]***	Generic	Δ	Δ	✓	Δ	✓	Δ	✓	Δ	Δ	Δ	✓	✓	✓	✓	Δ	Δ
					(p.106)	Antitrust (default)	(p.216)		(p55)				(p.21, 216)	Regulation (p.39, 216-217ff)	(p.107)	Regulation (p.39, 216-217ff)		

Findings		Inquiry scope	Platform power															
			Systemic (strategic, structuring, critical, societal) power		Significant market power (dominant, preponderant, influential position)		Intermediary power		Relational power (SBP/economic dependence)		Ecosystem power		Regulatory power		Informational power			
															Insider's power		Panoptic power	
			Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance
	CNNum (2015) ***[Digital Ambition report]***	Generic	✓ (p.8-9)	✓ Regulation (p.60-61, p.72)	✓ (p.36)	✓ Antitrust (p.60-61 *juncto* p.72, 74)	✓ (p.36, 58, 72)	Δ	✓ (p.36, 58, 72)	✓ Unfair competition/SBP laws (p.72)	✓ (p.59)	Δ	✓ (p.58)	✓ Antitrust (?) &/or regulation (p.60-66)	✓ (p.58)	✓ Antitrust (?) &/or regulation (p.60-66)	Δ	Δ
	CNNum (2014) ***[Platform Neutrality report]***	Generic	✓ (p.8, 10) specific (p.67)	Δ	✓ (p.9, 69-89 + p. 67)	✓ Antitrust (p.28)	✓ (p.8-9, 15)	Δ Antitrust (?) (p.15)	✓ (p. 92, 104)	✓ Unfair competition/SBP laws (p.29)	✓ (p.9, 64-67)	✓ Antitrust (?) (p.43)	✓ (p.9)	✓ Antitrust (?) (p.28, 43-44)	✓ (p.8)	✓ Antitrust (?) (p.43-44)	✓ (p.8)	Δ
NL	**ACM (2019)** ***[Mobile app store market study]***	App stores	Δ	Δ	✗ (p.18)	Δ Antitrust (default)	✓ (ch.3)	Δ Antitrust (?) ch.3	✓ (p.71)	✓ Antitrust (?) (p.68-71)	Δ (?) (§105)	Δ	Δ	Δ	Δ	Δ	Δ	Δ
PT	**AdC (2019)** ***[Digital issues report]***	Generic	Δ	Δ	✓ (§105)	Δ Antitrust (§125ff)	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
AU	**ACCC (2019a)** ***[Platforms inquiry final report]***	Online search / advertising, social media, news referral	✓ (p.13)	✓ (Co-) regulation (p.255)	✓ (ch.2)	Δ Antitrust (default)	✓ (p.1, 6, 8-9)	Δ	✓ (p.8-9, 15-16, 99-105, 163-164, 206ff)	✓ (Co-) regulation (p.164, 255-256, 509)	Δ	Δ	Δ	Δ	Δ (Implicitly : p.139?)	Δ	Δ	Δ
JP	**JFTC (2019)** ***[P2B report]***	e-commerce marketplaces / app stores	Δ	Δ	Δ (p. 7, 22)	Δ Antitrust (default)	Δ	Δ	✓ (p.23)	✓ Unfair competition/SBP law (default)	Δ	Δ	✓ (Indirectly: p.55)	✓ Unfair competition/SBP law (if SBP)	✓ Implicit in enforcement guidance and recommended transparency solution	✓ Antitrust (if dominance?)/unfair competition/SBP law (if SBP) (section 4); regulation (p.105)	✓ (Implicitly : p.63)	✓ Antitrust (if dominance?)/unfair competition/SBP law (if SBP) (p.63)
	Study Group (2018) ***[platforms interim paper]***	Generic	✓ (p.3)	✓ Antitrust (?) (p.13)	✓ (p.2-3)	Δ Antitrust (default)	✓ (p.4)	Δ	Δ	✓ Unfair competition/SBP law (default)	Δ	Δ	✓ (p.5)	✓ (Co-) regulation (p.12)	✓ (p.6)	✓ (Co-) regulation (p.12)	Δ	Δ
IN	**CCI (2020)** ***[e-commerce market study]***	e-commerce	Δ	Δ	Δ	Δ Antitrust (default)	Δ	Δ	✓ (§51, 64, 90)	✗ Self-regulation (§112-113)	Δ	Δ	✓ (§91)	Δ	✓ (§88)	Δ	✓ (§59)	Δ

Findings		Inquiry scope	Platform power															
			Systemic (strategic, structuring, critical, societal) power		Significant market power (dominant, preponderant, influential position)		Intermediary power		Relational power (SBP/economic dependence)		Ecosystem power		Regulatory power		Informational power			
															Insider's power		Panoptic power	
			Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance	Existence	Relevance
BRICS	**BRICS Centre (2019)** ***[Digital competition report]***	Generic	✓	Δ	✓	Δ	✓	✓	✓	✓	✓	✓	✓	✓	Δ	Δ	✓	✓
			(p.51)		(p.254)	Antitrust (default)	(p.204, 254, 332)	Antitrust (p.322-326)	(p.196, 255 + implicitly ch 3-4)	Antitrust (p.330-331)	(p.552)	Antitrust (p.300, 552)	(p.358)	Antitrust (p.549)			(p.337-338)	Antitrust (p.337-338)
OTHER	**IMF (2019)** ***[World Economic Outlook report]***	Generic	Δ	Δ	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
					(p.57-61)	Antitrust (default)												
	UNCTAD (2019a) ***[Competition issues paper]***	Generic	Δ	Δ	✓	✓	✓	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
			(p.11)	(p.11)	(p.3-4)	Antitrust (p.7)	(p.7)	Antitrust (?) (p.7) &/or regulation (p.11ff)	(p.7)	Antitrust (?) (p.7) &/or regulation (p.11ff)								
	UNCTAD (2019b) ***[Digital economy report]***	Generic	Δ	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	✓	Δ	✓	Δ
			(p.83)	Regulation (p.140)	(p.83-84 + p.40)	Antitrust (p.139)									(p.88)		(p.27)	
	German, French and Polish economic ministries (2019) ***[Modernising EU competition policy]***	Generic	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
			(p.2-3)	Antitrust &/or regulation (p.2)	(p.2-3)	Antitrust (default)												
	Stigler Committee (2019) ***[Platforms report]***	Generic	Δ	Δ	✓	Δ	✓	✓	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
					(p.7-8, 34 + p.9)	Antitrust (default)	(p.143, 150 + p.61)	Regulation (p.106)	(p.173)									
	BEUC (2019) ***[Competition policy in digital era report]***	Generic	Δ	Δ	Δ	Δ	Δ	✓	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
						Antitrust (default)		Regulation (p.24)										

✓: yes ✗: no Δ: not discussed/claimed or unclear

Appendix E. Remedies in policy reports

Findings		Inquiry scope	Type of remedies											
			Transparency duties		Non-discrimination duties		Good faith (duty of care, loyalty, fiduciary duties, incl. special duties toward providers on labour platforms)		Data-sharing duties		Interoperability duties		Unbundling	
EU	**EC SWD(2018)** ***[P2B regulation IA]***	Online search / marketplaces / app stores / social media	✓	Co-regulation (p.77-78 + art.3-10 of the regulation)	✓	Co-regulation (recital 48 regulation)	✓	Co-regulation (p.77, 79 + art 11, 17 of the regulation)	✗	(p.38-42, 73)	Δ		Δ	
	EC SWD(2016) ***[Copyright Directive IA]***	Creative/press publishing industries	Δ		Δ		✓	Regulation (p.155, 192 + art 17 of the Directive)	Δ		Δ		Δ	
	Crémer et al (2019) ***[Report for EC]***	Generic	✓	Antitrust & regulation (p.61, 63-65)	✓	Antitrust (p.61)	Δ		✓	Regulation (antitrust as fallback: p.68, 91, 109)	✓	Antitrust &/or regulation (p.58-60, 70-71, 82)	✓	Antitrust (p.67-68)
UK	**CMA (2020b)** ***[Online advertising market study final report]***	Online search / advertising, social media	✓	(Co-) regulation (§7.85ff + ch 8) & antitrust (?) (§10.28-10.29)	Δ	(Co-) regulation (§7.77 + ch 8) & antitrust (?) (§10.28-10.29)	✓	(Co-) regulation (§7.77 + ch 8) & antitrust (?) (§10.28-10.29)	✓	(Co-) regulation (§7.83, 7.111ff + ch 8) & antitrust (?) (§10.28-10.29)	✓	(Co-) regulation (§7.83; 7.111ff + ch 8) & antitrust (?) (§10.28-10.29)	✓	(Co-) regulation (§7.116ff + ch 8) & antitrust (?) (§10.28-10.29)
	CMA (2017) ***[DCT market study report]***	DCTs in car/home insurance, energy, broadband, flights, credit cards	✓	Regulation (§5.6-5.19)	Δ		✓	Regulation (§5.6-5.19)	Δ		Δ		Δ	
	HoL (2019) ***[Regulating in a Digital World report]***	Generic	✓	Regulation (§172)	✓	Regulation (§167, 172)	✓	Regulation (§172)	Δ		Δ		Δ	
	HoL (2016) ***[Platforms & the DSM report]***	Generic	✓	Consumer protection law (§285-286)	✓	Co-regulation (§133)	✓	Co-regulation (§133)	Δ		Δ		Δ	
	Furman et al (2019) ***[Report for UK Gov]***	Generic	✓	(Co-) regulation (§2.31ff)	✓	(Co-) regulation (§2.36ff)	Δ		✓	Regulation (§2.87-2.94)	✓	Regulation (§2.68-2.78)	✗	(§5.13)
DE	**BMWi (2019a)** ***[Competition 4.0 report]***	Generic	✓	Co-regulation (p.52)	✗	(p.54)	Δ		✓	Regulation (antitrust as fallback: p.36-38)	Δ		✓	Antitrust (p.78)
	BMWi (2019b) ***[Draft ARC amendment]***	Generic	✓	Antitrust (p.9, 77)	✓	Antitrust (p.8, 75)	Δ		✓	Antitrust (p.8, 72)	✓	Antitrust (p.9, 76-77)	Δ	
	Schweitzer et al (2018) ***[Report for BMWi]***	Generic	✓	Unfair competition/consumer protection/contract law/new regulation (p.118-119)	✓	Antitrust (p.115)	✓	Unfair competition/consumer protection/contract law/new regulation (p.118-119)	✓	Antitrust (p.159-160, but see also p.115)	Δ		✗	(p.121)

Findings		Inquiry scope	Type of remedies											
			Transparency duties		Non-discrimination duties		Good faith (duty of care, loyalty, fiduciary duties, incl. special duties toward providers on labour platforms)		Data-sharing duties		Interoperability duties		Unbundling	
FR	**ADLC (2020)** ***[Antitrust & digital issues paper]***	Generic	Δ		Δ		Δ		Δ		Δ		Δ	
	ADLC (2018) ***[Online advertising opinion]***	Online search / advertising, social media	✓	Regulation (§262-276)	Δ	Antitrust (?) (§252ff)	Δ		Δ		Δ		Δ	
	Senate (2019) ***[Digital sovereignty report]***	Generic	✓	(Co-?) regulation (p.47-49)	✓	Regulation (p.44-45)	✓	Regulation (p.47)	✓	Regulation (p.47)	Δ		✗	(p.38-39)
	ESEC (2019) ***[Digital sovereignty report]***	Generic	✓	Regulation (p. 16, 32-33)	✓	Regulation (p. 16-18, 33)	✓	Labour law (p.27)	Δ		Δ		Δ	
	IGF & CGE (2019) ***[Report for FR Gov]***	Generic	✓	Regulation (p.22)	Δ		✓	Regulation (p.22)	✓	Regulation (p.22)	✓	Regulation (p.22)	Δ	
	Parliament (2015) ***[Freedoms in the digital age]***	Generic	✓	Consumer protection law (p.216); Regulation (p.224)	✓	Antitrust (p.211-212) Regulation (p.223-225)	✓	Unfair competition/SBP laws (p.215) Regulation (p.223-225)	Δ		Δ		Δ	
	Council of the State (2014) ***[Fundamental rights in the digital age]***	Generic	✓	(Co-) regulation (p.278-279)	✓	Antitrust (but no search neutrality (p.223)	✓	New/bolstered (Co-) regulation (p.224, 278-281)	Δ		Δ		Δ	
	CNNum (2015) ***[Digital Ambition report]***	Generic	✓	Antitrust (?), unfair competition/SBP law &/or regulation (p.59-66, 72, 74	✓	Antitrust (?), unfair competition/SBP law &/or regulation (p.59-60, 62, 69)	✓	Unfair competition + SBP laws &/or regulation (p.72)	Δ		✓	Antitrust &/or regulation (p.70-71)	Δ	
	CNNum (2014) ***[Platform Neutrality report]***	Generic	✓	Antitrust (?), unfair competition/SBP law & regulation (p.12, 44-45)	✓	Antitrust (?), unfair competition/SBP law & regulation (p.11, 28-29, 31)	✓	Unfair competition/SBP laws (p.29)	✓	Regulation (?) (p. 39, 41)	Δ		✓	Antitrust (?) p. 28
NL	**ACM (2019)** ***[Mobile app store market study]***	App stores	✓	Antitrust (p.107-108) &/or regulation (p.108)	✓	Antitrust (p.106-107) &/or regulation (p.108)	Δ		Δ		Δ		Δ	
PT	**AdC (2019)** ***[Digital issues report]***	Generic	✓	Co-regulation (§306)	Δ	Antitrust (?) (§301-304)	Δ		Δ		Δ		Δ	
AU	**ACCC (2019a)** ***[Platforms inquiry final report]***	Online search / advertising, social media, news referral	✓	(Co-) regulation (p.256)	✓	(Co-) regulation (p.256) antitrust (p.531)	✓	(Co-) regulation (p.164, 249, 256-257, 274ff)	✓	(Co-) regulation (p.249, 256-257)	Δ		✗	(p.117)

Findings		Inquiry scope	Type of remedies											
			Transparency duties		Non-discrimination duties		Good faith (duty of care, loyalty, fiduciary duties, incl. special duties toward providers on labour platforms)		Data-sharing duties		Interoperability duties		Unbundling	
JP	**JFTC (2019)** ***[P2B report]***	e-commerce marketplaces / app stores	✓	Antitrust(?)/Unfair competition/SBP law (?) (p.33, 38, 44, 51, 53, 56, 63, 68, 71, 78, 94, 99); regulation (p.105)	✓	Antitrust(?)/Unfair competition/SBP law (?) (p.68)/ regulation (p.105)	✓	Unfair competition/SBP law (?) (33, 47, 51, 56, 68, 71, 83, 99, 103)	✓	Antitrust (?)/Unfair competition/SBP law (p.11-12)	Δ	Yes, if this is included in the unexplained "data openness" remedy (p.12-13)	Δ	
	Study Group (2018) ***[platforms interim paper]***	Generic	✓	Antitrust (?) (p.13) &/or co-regulation (p.12)	✓	Antitrust (?) (p.13) &/or co-regulation (p.12)	✓	Antitrust (?) (p.13) &/or co-regulation (p.12)	Δ		Δ		Δ	
IN	**CCI (2020)** ***[e-commerce market study]***	e-commerce	Δ		Δ		Δ		Δ		Δ		Δ	
BRICS	**BRICS Centre (2019)** ***[Digital competition report]***	Generic	✓	Co-regulation (p.455-456)	✓	Antitrust (p.566)	✓	Antitrust &/or bolstered labour law (p.384-395); unfair competition/SBP laws (p.610)	✓	Antitrust (p.600)	✓	Antitrust &/or regulation (p.450)	✓	Antitrust or regulation (p.430, 435-436)
OTHER	**IMF (2019)** ***[World Economic Outlook report]***	Generic	Δ		Δ		Δ		Δ		Δ		✓	Antitrust (p.69)
	UNCTAD (2019a) ***[Competition issues paper]***	Generic	✓	Regulation (p.12)	✓	Antitrust &/or regulation (p.11-13)	✓	Antitrust (?) &/or regulation (p.11-13)	Δ		Δ		Δ	(See p.13-14)
	UNCTAD (2019b) ***[Digital economy report]***	Generic	Δ		✓	Regulation (p.140)	✓	Regulation (p.140)	✓	Regulation (p.140)	Δ		Δ	(See p.141)
	German, French and Polish economic ministries (2019) ***[Modernising EU competition policy]***	Generic	Δ		Δ	Antitrust (?) &/or regulation (p.2)	✓	Antitrust(?) &/or regulation (p.2)	✓	Antitrust(?) &/or regulation (p.2)	✓	Antitrust(?) &/or regulation (p.2)	Δ	
	Stigler Committee (2019) ***[Platforms report]***	Generic	✓	Regulation (p.187-189)	✓	Regulation (p.118)	✓	Regulation (p.194-195)	✓	Antitrust &/or regulation (p.117)	✓	Regulation (p.117-118)	✓	Regulation (p.100, 144)
	BEUC (2019) ***[Competition policy in digital era report]***	Generic	Δ		Δ		Δ		Δ		Δ		✓	Antitrust (p.21)

✓: recommended ✗: rejected Δ: not discussed/claimed or unclear

BIBLIOGRAPHY

BOOKS AND CHAPTERS

—— Nihoul P and Van Cleynenbreugel P (eds), *The Roles of Innovation in Competition Law Analysis* (Edward Elgar 2018).

—— Shakespeare W and Burrow C (eds), *The Oxford Shakespeare: Complete Sonnets and Poems* (Oxford University Press 2002).

ABA Section of Antitrust Law, *Federal Statutory Exemptions from Antitrust Law* (American Bar Association 2007).

Akman P, *The Concept of Abuse in EU Competition Law. Law and Economic Approaches* (Hart Publishing 2015).

Amato G, *Antitrust and the Bounds of Power. The Dilemma of Liberal Democracy in the History of the Market* (Hart Publishing 1997).

Anchustegui IH, *Buyer Power in EU Competition Law* (Concurrences 2017).

Anderson E, 'The Business Enterprise as an Ethical Agent' in Rangan S (ed), *Performance and Progress: Essays on Capitalism, Business, and Society* (Oxford University Press 2015).

Andriychuk O, 'Thinking Inside the Box: Why Competition as a Process is a Sui Generis Right – A Methodological Observation' in Zimmer D (ed), *The Goals of Competition Law* (Edward Elgar 2012).

—— *The Normative Foundations of European Competition Law. Assessing the Goals of Antitrust through the Lens of Legal Philosophy* (Edward Elgar 2017).

Areeda PE and Hovenkamp H, *Antitrust Law: An Analysis of Antitrust Principles and Their Application* (Supplement 8/2019, rev edn, Wolters Kluwer 1978).

Arneson R J, 'Equality of Opportunity' in Zalta EN (ed), *The Stanford Encyclopedia of Philosophy* (rev edn, Stanford University 2015) <https://stanford.io/2XBJ3SB> accessed 29 September 2020.

Attas D, 'Lockean Justification of Intellectual Property' in Grosseries A, Marciano A and Strowel A (eds), *Intellectual Property and Theories of Justice* (Palgrave Macmillan 2008).

Ayal A, 'Anti-Anti Regulation: The Supplanting of Industry Regulators with Competition Agencies and How Antitrust Suffers as a Result' in Drexl J and Di Porto F (eds), *Competition Law as Regulation* (Edward Elgar 2015).

—— *Fairness in Antitrust. Protecting the Strong from the Weak* (Hart Publishing 2016).

Baker A, 'Simplicity' in Zalta EN (ed), *The Stanford Encyclopedia of Philosophy* (rev edn, Stanford University 2016) <https://stanford.io/31tTR6r> accessed 29 September 2020.

Baker JB, *The Antitrust Paradigm. Restoring a Competitive Economy* (Harvard University

Press 2019).

Bakhoum M, 'Abuse Without Dominance in Competition Law: Abuse of Economic Dependence and its Interface with Abuse of Dominance' in Di Porto F and Podzsun R (eds), *Abusive Practices in Competition Law* (Edward Elgar 2018).

Barrère C, 'Defining Economic Democracy: A Challenge. An Institutionalist Framework' in Marciano A and Josselin J-M (eds), *Democracy, Freedom and Coercion. A Law and Economics Approach* (Edward Elgar 2007).

Behrens P, 'Comment: Controlling Dominance or Protecting Competition: From Individual Abuses to Responsibility for Competition' in Ullrich H (ed), *The Evolution of European Competition Law – Whose Regulation, Which Competition?* (Edward Elgar 2006).

—— 'The Ordoliberal Concept of "Abuse" of a Dominant Position and its Impact on Article 102 TFEU' in Di Porto F and Podszun R (eds), *Abusive Practices in Competition Law* (Edward Elgar 2018).

Belleflamme P and Peitz M, *Industrial Organization: Markets and Strategies* (2nd ed, Cambridge University Press 2015).

—— 'Platforms and Network Effects' in Corchón LC and Marini MA (eds), *Handbook of Game Theory and Industrial Organization, Volume II* (Edward Elgar 2018a).

Berlin I, *Freedom and Its Betrayal. Six Enemies of Human Liberty* (Hardy H ed, 2nd edn, Princeton University Press 2014).

Böhm F, Eucken W and Großmann-Doerth H, 'The Ordo Manifesto of 1936' in Peacock A and Willgerodt M (eds), *German's Social Market Economy: Origins and Evolution* (Palgrave Macmillan 1989).

Bonefeld W, *The Strong State and the Free Economy* (Rowman & Littlefield 2017).

Bönker and Hans-Jurgen Wagener, 'Hayek and Eucken on State and Market Economy' in Labrousse A and Weisz J-D (eds), *Institutional Economics in France and Germany. German Ordoliberalism versus the French Regulation School* (Springer 2001).

Bork R, *The Antitrust Paradox* (Basic Books 1978).

Boudreau KJ and Hagiu A, 'Platform Rules: Multi-Sided Platforms as Regulators' in Gawer A (ed), *Platforms, Markets and Innovation* (Edward Elgar 2009).

Boyer S, 'German Contemporary Analyses of Economic Order: Standard Ordnungstheorie, Ordoliberalism and Ordnungsökonomik in Perspective' in Labrousse A and Weisz J-D (eds), *Institutional Economics in France and Germany. German Ordoliberalism versus the French Regulation School* (Springer 2001).

Boyle J, *The Public Domain. Enclosing the Commons of the Mind* (Yale University Press 2008).

Brandeis LD, 'On Industrial Relations' in Fraenkel OK (ed), *The Curse of Bigness: Miscellaneous Papers of Louis D. Brandeis* (Viking Press 1934).

Brennan G and Buchanan JM, *The Reason of Rules. Constitutional Political Economy* (Cambridge University Press 1985).

Bronson P and Merryman A, *Top Dog: The Science of Winning and Losing* (Ebury Digital 2013).

Buchanan JM, 'Fairness, Hope, and Justice' in Skurski R (ed), *New Directions in Economic*

Justice (University of Notre Dame Press 1983).

Budzinski O, 'Modern Industrial Economics: Open Problems and Possible Limits' in Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the Economic Approach. Foundations and Limitations* (Edward Elgar 2011).

Burricher J, 'The Objectives of Competition Policy. Panel Discussion' in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual: 2007. A Reformed Approach to Article 82 EC* (Hart Publishing 2008).

Carstensen PC, *Competition Policy and the Control of Buyer Power: A Global Issue* (Edward Elgar 2017).

Carter I, *A Measure of Freedom* (Oxford University Press 1999).

—— 'Positive and Negative Liberty' in Zalta EN (ed), *The Stanford Encyclopedia of Philosophy* (rev edn, Stanford University 2018) <https://stanford.io/2LExXnc> accessed 29 September 2020.

Cash D, *Regulation and the Credit Rating Agencies: Restraining Ancillary Services* (Routledge 2018).

Cavanagh M, *Against Equality of Opportunity* (Oxford University Press 2002).

Cheng TK and Gal MS, 'Superior Bargaining Power: Dealing with Aggregate Concentration Concerns' in Di Porto F and Podszun R (eds), *Abusive Practices in Competition Law* (Edward Elgar 2018).

Christiano T, 'Democracy' in Zalta EN (ed), *The Stanford Encyclopedia of Philosophy* (rev edn, Stanford University 2015) <https://stanford.io/2uHWPCu> accessed 29 September 2020.

Cohen GA, *Why Not Socialism?* (Princeton University Press 2009).

Cohen JE, 'Between Truth and Power' in Hildebrandt M and van den Berg B (eds), *Information, Freedom and Property: The Philosophy of Law Meets the Philosophy of Technology* (Routledge 2016).

Cohen R and Wang T, *Android Application Development for Intel® Platform* (Apress 2014).

Collier P, *The Future of Capitalism: Facing the New Anxieties* (HarperCollins 2018).

Colomo PI, *The Shaping of EU Competition Law* (Cambridge University Press 2018).

Cortada JM, *IBM: The Rise and Fall and Reinvention of a Global Icon* (The MIT Press 2019).

Cseres KJ, *Competition Law and Consumer Protection* (Kluwer Law International 2005).

Cudd A E, *Analyzing Oppression* (Oxford University Press 2006).

Cusumano MA, Gawer A, Yoffie DB, *The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power* (HarperBusiness 2019).

Davies W, *The Limits of Neoliberalism. Authority, Sovereignty and the Logic of Competition* (revised edn, Sage 2017).

de Tocqueville A, *Democracy in America. Historical-Critical Edition of* De la Démocratie en Amerique' (Nolla E ed, Schleifer JT tr, Liberty Fund 2010).

DeFillippi R, Hunt P, Dumas C and Hung K, 'Crowd-Sourcing and the Evolution of the Microstock Photography Industry: The Case of iStockphoto and Getty Images' in

DeFillippi R and Wikström P (eds), *International Perspectives on Business Innovation and Disruption in the Creative Industries. Film, Video and Photography* (Edward Elgar 2014).

Di Porto F, 'Abuses of Information and Informational Remedies: Rethinking Exchange of Information Under Competition Law' in Drexl J and Di Porto F (eds), *Competition Law as Regulation* (Edward Elgar 2015).

Drexl J, 'Competition Law as Part of the European Constitution' in von Bogdandy A and Bast J (eds), *Principles of European Constitutional Law* (Hart publishing 2006).

—— 'On the (a)political Character of the Economic Approach to Competition Law' in Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the Economic Approach. Foundations and Limitations* (Edward Elgar 2011).

—— 'Déséquilibres Économiques et Droit de la Concurrence' in Boy L (ed), *Les Déséquilibres Économiques et le Droit Économique* (Larcier 2014).

—— 'Consumer Welfare and Consumer Harm: Adjusting Competition Law and Policies to the Needs of Developing Jurisdictions' in Gal MS, Bakhoum M, Drexl J, Fox EM and Gerber DJ (eds) *The Economic Characteristics of Developing Jurisdictions. Their Implications for Competition Law* (Edward Elgar 2015).

Ducci F, *Natural Monopolies in Digital Platform Markets* (Cambridge University Press 2020).

Dunne N, *Competition Law and Economic Regulation. Making and Managing Markets* (Cambridge University Press 2015).

Dworkin G, *The Theory and Practice of Autonomy* (Cambridge University Press 1988).

Dworkin R, *A Matter of Principle* (Harvard University Press 1985).

—— *Sovereign Virtue. The Theory and Practice of Equality* (2000).

Economides N, 'Competition, Compatibility, and Vertical Integration in the Computing Industry' in Eisenach JA and Lenard TM (eds), *Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace. Proceedings of a conference held by The Progress & Freedom Foundation in Washington, DC February 5, 1998* (Springer Science+Business Media 1999).

Eucken W, 'What Kind of Economic and Social System?' in Peacock A and Willgerodt M (eds), *Germany's Social Market Economy: Origins and Evolution* (Palgrave Macmillan 1989).

Evans DS and Schmalensee R, *Matchmakers. The New Economics of Multisided Platforms,* (Harvard Business Review Press 2016).

Evensky J, *Adam Smith's Moral Philosophy: A Historical and Contemporary Perspective on Markets, Law, Ethics, and Culture* (Cambridge University Press 2005).

Ezrachi A and Stucke ME, *Virtual Competition. The Promise and Perils of the Algorithm-Driven Economy* (Harvard University Press 2016).

Feldman AM, 'Welfare Economics' in Palgrave Macmillan (eds), *The New Palgrave Dictionary of Economics* (rev edn, Palgrave Macmillan 2008).

Ferreira FHG and Peragine V, 'Individual Responsibility and Equality of Opportunity' in Adler M and M Fleurbaey M (eds), *The Oxford Handbook of Well-Being and Public Policy* (Oxford University Press 2016).

Féteira LT, *The Interplay between European and National Competition Law after Regulation 1/2003: "United (Should) We Stand?"* (Kluwer Law International 2015).

Fikentscher W, Hacker P and Podszun R, *FairEconomy. Crises, Culture, Competition and the Role of Law* (Springer 2013).

Fishkin J, *Bottlenecks: A New Theory of Equal Opportunity* (Oxford University Press 2014).

Flew A, *The Politics of Procrustes. Contradictions of enforced equality* (Prometheus Books 1981).

Foucault M, *Power. Essential Works of Foucault, 1954-1984* (Faubion JD ed, The New Press 2001).

Frankfurt HG, 'Coercion and Moral Responsibility' in Honderich T(ed), *Essays on Freedom of Action* (Routledge 2015).

Fried BH, *The Progressive Assault on Laissez-Faire. Robert Hale and the First Law and Economics Movement* (Harvard University Press 2001).

Fried C, *Contract as Promise: A Theory of Contractual Obligation* (Harvard University Press 1981).

Friedman J, *Hayek's Political Theory, Epistemology, and Economics* (Routledge 2016).

Fuller LL, *The Morality of Law* (2nd edn, Yale University Press 1969).

Galbraith JK, *American Capitalism. The Concept of Countervailing Power* (Hamish Hamilton 1952).

—— *American Capitalism. The Concept of Countervailing Power* (2nd edn, Blackwell 1980).

Galston W, 'A Liberal Defense of Equality of Opportunity' in Pojman LP and Westmoreland R (eds), *Equality: Selected Readings* (Oxford University Press 1997).

Gates B, *The Road Ahead* (Viking 1995).

Gauthier R, 'Competition Law, Free Movement of Players, and Nationality Restrictions' in McCann MA (ed), *The Oxford Handbook of American Sports Law* (Oxford University Press 2018).

Gawer A and Cusumano MA, *Platform Leadership: How Intel, Microsoft, and Cisco Drive Industry Innovation* (Harvard Business School Press 2002).

—— 'Platforms and Innovation' in Dodgson M, Gann DM and Phillips N (eds), *The Oxford Handbook of Innovation Management* (Oxford University Press 2014).

Gerber DJ, 'The Future of Article 82: Dissecting the Conflict' in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual: 2007. A Reformed Approach to Article 82 EC* (Hart Publishing 2008).

Gilbert RJ, *Innovation Matters: Competition Policy for the High-Technology Economy* (MIT Press 2020).

Ginsburg J and Strowel A, 'Copyright Liability for Hyperlinking' in Aplin T (ed), *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar 2020)

Glas R, *Battlefields of Negotiation: Control, Agency, and Ownership in World of Warcraft*

(Amsterdam University Press 2012).

Gomberg P, *How to Make Opportunity Equal. Race and Contributive Justice* (Blackwell Publishing 2007).

Graef I, *EU Competition Law, Data Protection and Online Platforms: Data as Essential Facility* (Wolters Kluwer 2016).

Greenstein S, 'Internet Infrastructure' in Peitz M and Waldfogel J (eds), *The Oxford handbook of the Digital Economic* (Oxford University Press 2012).

Grimes WS, 'The Sylvania Free Rider Justification for Downstream-Power Vertical Restraints: Truth or Invitation for Pretext?' in Pitofsky R (ed), *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford University Press 2008).

Grimm D, *Sovereignty: The Origin and Future of a Political and Legal Concept* (Columbia University Press 2015).

Großmann-Doerth H, 'Selbstgeschaffenes Recht der Wirtschaft und staatliches Recht' in Goldschmidt N and Wohlgemuth M (eds), *Grundtexte zur Freiburger Tradition der Ordnungsökonomik* (Mohr Siebeck 2008).

Grossekettler HG, 'On Designing an Economic Order. The Contributions of the Freiburg School' in Walker DA (ed), *Perspectives on Economic Thought. Volume II. Twentieth-Century Economic Thought* (Edward Elgar 1989).

Harcourt BE, *The Illusion of Free Markets Punishment and the Myth of Natural Order* (Harvard University Press 2011).

Harvard Business Review, *Monopolies and Tech Giants: The Insights You Need from Harvard Business Review* (Harvard Business School Publishing 2020).

Hayashi S, 'The Goals of Japanese Competition Law' in Drexl J, Idot L and Monéger J (eds), *Economic Theory and Competition Law* (Edward Elgar 2009).

Hayek FA, *Individualism and Economic Order* (first published 1948, University of Chicago Press 1980).

—— *The Fatal Conceit. The Errors of Socialism* (Routledge 1988).

—— *The Constitution of Liberty. The Definitive Edition* (Hamowy R ed, University of Chicago Press 2011).

—— *Law, Legislation and Liberty. A New Statement of the Liberal Principles of Justice and Political Economy* (first published 1976, first published in one volume, 1982, Routledge 2013).

Hicks J, *Collected Essays on Economic Theory* (Basil Blackwell 1981).

Hovenkamp H, *The Antitrust Enterprise: Principle and Execution* (Harvard University Press 2005).

Jacob R, *IP and Other Things: A Collection of Essays and Speeches* (Hart Publishing 2005).

Jacobs LA, *Pursuing Equal Opportunities. The Theory and Practice of Egalitarian Justice* (Cambridge University Press 2004).

Just RE, Hueth DL and Schmitz A, *The Welfare Economics of Public Policy: A Practical Approach to Project and Policy Evaluation* (Edward Elgar 2004).

Kalintiri A, *Evidence Standards in EU Competition Enforcement: The EU Approach* (Hart Publishing 2019).

Kaplow L, 'On the Choice of Welfare Standard in Competition Law' in Zimmer D (ed), *The Goals of Competition Law* (Edward Elgar 2012).

—— and Shapiro C, 'Antitrust' in Polinsky AM and Shavell S (eds), *Handbook of Law and Economics*, vol 2 (Elsevier 2007).

Kerber W, 'Should Competition Law Promote Efficiency? Some Reflections of an Economist on the Normative Foundations of Competition Law' in Drexl J, Idot L and Monéger J, *Economic Theory and Competition Law* (Edward Elgar 2009).

—— 'Competition, Innovation, and Competition Law: Dissecting the Interplay' in Gerard D, Meyring B and Morgan de Rivery E (eds), *Dynamic Markets, Dynamic Competition and Dynamic Enforcement. The Impact of the Digital Revolution and Globalisation on Competition Law Enforcement in Europe* (Bruylant 2018).

Kelly K, *New Rules for the New Economy: 10 Radical Strategies for a Connected World* (Viking 1998).

Kennedy G, *Adam Smith's Lost Legacy* (Palgrave Macmillan 2005).

Keynes JM, *The General Theory of Employment, Interest, and Money* (first published 1936, Palgrave Macmillan 2018).

Kirkpatrick D, *The Facebook Effect. The Inside Story of the Company That is Connecting the World* (Simon & Schuster 2010).

Kirkwood JB and Lande RH, 'The Chicago School's Foundation is Flawed: Antitrust Protects Consumers, Not Efficiency' in Pitofsky R (ed) *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford University Press 2008).

Komesar NK, *Imperfect Alternatives: Choosing Institutions in Law, Economics, and Public Policy* (University of Chicago Press 1994).

Kuhn T, *The Structure of Scientific Revolutions* (University of Chicago Press 1962).

Lakatos I, 'History of Science and its Rational Reconstructions' in Worral J and Currie G (eds), *The Methodology of Scientific Research Programmes* (Cambridge University Press 1978).

Lamond G, 'Coercion' in LaFollette H (ed), *International Encyclopedia of Ethics* (Blackwell Publishing, online edn, 2013).

Lao M, 'Free Riding: An Overstated, and Unconvincing, Explanation for Resale Price Maintenance' in Pitofsky R (ed), *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford University Press 2008).

Levine R, *Free Ride. How Digital Parasites are Destroying the Culture Business, and How the Culture Business Can Fight Back* (Doubleday 2011).

Lianos I, 'The Vertical/Horizontal Dichotomy in Competition Law: Some Reflections with Regard to Dual Distribution and Private Labels' in Ezrachi A and Bernitz U (eds), *Private Labels, Brands and Competition Policy: The Changing Landscape of Retail Competition* (Oxford University Press 2009).

—— 'Some Reflections on the Question of the Goals of EU Competition Law' in Lianos

I and Geradin D (eds), *Handbook on European Competition Law. Substantive Aspects* (Edward Elgar 2013a).

—— 'Competition Law Remedies in Europe' in Lianos I and Geradin D (eds), *Handbook on European Competition Law. Enforcement and Procedure* (Edward Elgar 2013b).

—— 'The Principle of Effectiveness, Competition Law Remedies and the Limits of Adjudication' in Lowe P, Marquis M and Monti G (eds), *European Competition Law Annual 2013* (Hart Publishing 2016).

Lindblom CE, *Politics and Markets: The World's Political-economic Systems* (Basic Books 1977).

Lippert-Rasmussen K, *Luck Egalitarianism* (Bloomsbury 2016).

Locke J, *Two Treatises of Government* (McMaster University Archive of the History of Economic Thought 1999).

Lovett F, *A General Theory of Domination and Justice* (Oxford University Press 2010).

Lynskey O, 'The Power of Providence: The Role of Platforms in Leveraging the Legibility of Users to Accentuate Inequality' in Moore M and Tambini D (eds), *Digital Dominance: The Power of Google, Amazon, Facebook, and Apple* (Oxford University Press 2018).

MacCormick N, 'Coherence in Legal Justification' in Peczenik A, Lindahl L and Van Roermund B (eds) *Theory of Legal Science: proceedings of the Conference on Legal Theory and Philosophy of Science, Lund, Sweden, December 11-14, 1983* (D. Reidel 1983).

—— *Rhetoric and the Rule of Law: A Theory of Legal Reasoning* (Oxford University Press 2005).

Maggiolino M, 'The Regulatory Breakthrough of Competition Law: Definitions and Worries' in Drexl J and Di Porto F (eds), *Competition Law as Regulation* (Edward Elgar 2015).

Marty F, 'La Révolution n'a-t-elle Pas Eu Lieu ? De la Place de l'Analyse Économique Dans le Contentieux Concurrentiel de l'UE' in Valérie Giacobbo-Peyronnel and Christophe Verdure (eds), *Contentieux du Droit de la Concurrence de l'Union Européenne. Questions d'Actualité et Perspectives* (Larcier 2017).

Marx K, *Capital. A Critique of Political Economy*, vol 1 (tr Ben Fowkes, 2nd edn, Penguin Books 1990).

Mason A, *Levelling the Playing Field. The Idea of Equal Opportunity and its Place in Egalitarian Thought* (Oxford University Press 2006).

Massarotto G, *Antitrust Settlements: How a Simple Agreement Can Drive the Economy* (Wolters Kluwer 2019).

Maxwell WJ, *Smart(er) Internet Regulation Through Cost-Benefit Analysis. Measuring Harms to Privacy, Freedom of Expression, and the Internet Ecosystem* (Presses des Mines 2017).

McAfee A and Brynjolfsson E, *Machine, Platform, Crowd. Harnessing Our Digital Future* (W. W. Norton & Company 2017).

McQuarrie EF, *The New Consumer Online. A Sociology of Taste, Audience, and Publics*

(Edward Elgar 2015).

Merges RP, *Justifying Intellectual Property* (Harvard University Press 2011).

Mestmäcker E-J, 'The Development of German and European Competition Law with Special Reference to the EU Commission's Article 82 Guidance of 2008' in Pace LF (ed), *European Competition Law: The Impact of the Commission's Guidance on Article 102* (Edward Elgar 2011).

Miller D, *Principles of Social Justice* (Harvard University Press 1999).

—— 'Liberalism, Equal Opportunities and Cultural Commitments' in Kelly P (ed), *Multiculturalism Reconsidered Culture and Equality and its Critics* (Polity Press 2002).

Mokyr J, *A Culture of Growth: The Origins of the Modern Economy* (Princeton University Press 2016).

Motta M, *Competition Policy. Theory and Practice* (Cambridge University Press 2004).

Nazzini R, *The Foundations of European Union Competition Law. The Objective and Principles of Article 102* (Oxford University Press 2011).

Nozick R, 'Coercion' in Morgenbesser S, Suppes P and White M (eds), *Philosophy, Science, and Method: Essays in Honor of Ernest Nagel* (St Martin's Press 1969).

—— *Anarchy, State, and Utopia* (first published 1974, Basic Books 2013).

O'Donoghue R and Padilla J, *The Law and Economics of Article 102 TFEU* (Hart Publishing 2013).

Op Den Kamp C and Hunter D, 'Introduction. Of People, Places, and Parlance' in Op Den Kamp C and Hunter D (eds), *A History of Intellectual Property in 50 Objects* (Cambridge University Press 2019).

Paes de Barros R, Ferreira FHG, Molinas Vega JR and Saavedra Chanduvi J, *Measuring Inequality of Opportunities in Latin America and the Caribbean* (World Bank and Palgrave Macmillan 2009).

Papadopoulou M-D and Moustaka E-M, 'Copyright and the Press Publishers Right on the Internet: Evolutions and Perspectives' in Synodinou T, Jougleux P, Markou C and Prastitou T (eds), *EU Internet Law in The Digital Era: Regulation and Enforcement* (Springer 2020).

Parker GG, Van Alstyne MW and Choudary SP, *Platform Revolution* (W. W. Norton & Company 2016).

Pasquale F, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015).

Patterson MR, *Antitrust Law in the New Economy. Google, Yelp, LIBOR, and the Control of Information* (Harvard University Press 2017).

Peritz RJR, *Competition Policy in America: History, Rhetoric, Law* (rev edn, Oxford University Press 2000).

Perloff JM, *Microeconomics* (6th edn, Addison-Wesley 2012).

Perrot A, 'Appropriation of the Legal System by Economic Concepts: Should Conflicting Goals be Considered?' in Drexl J, Idot L and Monéger J (eds), *Economic Theory and Competition Law* (Edward Elgar 2009).

Pettit P, *Republicanism. A Theory of Freedom and Government* (Clarendon Press 1997).

Philippon T, *The Great Reversal. How America Gave Up on Free Markets* (The Belknap Press of Harvard University Press 2019).

Piketty T, *Capital et Idéologie* (Seuil 2019).

Pitofsky R, 'Introduction: Setting the Stage' in Pitofsky R (ed), *How the Chicago School Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford University Press 2008).

Popper K, *The Open Society and Its Enemies* (first published 1945, Princeton University Press 2013).

Posner RA, *The Economics of Justice* (Harvard University Press 1981).

—— *The Problems of Jurisprudence* (Harvard University Press 1990).

—— *Antitrust Law* (2nd edn, University of Chicago Press 2001).

—— *Economic Analysis of Law* (9th edn, Wolter Kluwer Law & Business 2014).

Raustiala K and Sprigman C, *The Knockoff Economy: How Imitation Sparks Innovation* (Oxford University Press 2012).

Rawls J, *A Theory of Justice* (Harvard University Press 1971).

—— *A Theory of Justice. Revised Edition* (Harvard University Press 1999).

Rey P, 'Roundtable discussion' in Ehlermann C-D and Marquis M (eds), *European Competition Law Annual 2007. A Reformed Approach to Article 82 EC* (Hart Publishing 2008).

Robbins L, *An Essay on the Nature and Significance of Economic Science* (3rd edn, Macmillan 1984).

Robertson VHSE, *Competition Law's Innovation Factor: The Relevant Market in Dynamic Contexts in the EU and the US* (Hart Publishing 2020).

Robinson J, *Economic Heresies: Some Old-Fashioned Questions in Economic Theory* (Palgrave Macmillan 1971).

Roemer JE, *Theories of Distributive Justice* (Harvard University Press 1996).

—— *Equality of Opportunity* (Harvard University Press 1998).

—— 'Equality of Opportunity' in Palgrave Macmillan (eds), *The New Palgrave Dictionary of Economics* (rev edn, Palgrave Macmillan 2008).

—— and Trannoy A, 'Equality of Opportunity' in Atkinson AB and Bourguignon F (eds), *Handbook of Income Distribution* (vol 2A, Elsevier 2015).

Rosanvallon P, *La Démocratie Inachevée. Histoire de la Souveraineté du People en France* (Gallimard 2000).

Sagers C, *United States v. Apple. Competition in America* (Harvard University Press 2019).

Samuels WJ, 'The Concept of "Coercion" in Economics' in Samuels WJ, Medema SG and Schmid AA (eds), *The Economy as a Process of Valuation* (Edward Elgar 1997).

Samuelson PA, *The Collected Scientific Papers of Paul A. Samuelson*, vol 2 (Stiglitz JE ed, Oxford & IBH Publishing 1966).

Sassoon D, *The Anxious Triumph. A Global History of Capitalism 1860-1914* (Allen Lane 2019).

Scanlon TM, *Why Does Inequality Matter?* (Oxford University Press 2018).

Schaar JH, 'Equality of Opportunity, and Beyond' in Pojman LP and Westmoreland R (eds), *Equality: Selected Readings* (Oxford University Press 1997).

Schmidt E and Cohen J, *The New Digital Age. Reshaping the Future of People, Nations and Business* (Alfred A Knopf 2013).

Scholz T, *Uberworked and Underpaid: How Workers are Disrupting the Digital Economy* (Polity Press 2017).

Schumpeter JA, *Theory of Economic Development* (Oxford University Press, 1934).

—— *Capitalism, Socialism and Democracy* (online edn, Routledge 2003).

Schweitzer H, 'The Role of Consumer Welfare in EU Competition Law' in Drexl J, Hilty RM, Boy L, Godt C and Remiche B (eds), *Technologie et Concurrence. Mélanges en l'honneur de Hanns Ullrich/Technology and Competition. Contributions in honour of Hanns Ullrich* (Larcier 2010).

—— and Patel KK, 'EU Competition Law in Historical Context' in Patel KK and Schweitzer H (eds), *The Historical Foundations of EU Competition Law* (Oxford University Press 2013).

Segall S, *Equality and Opportunity* (Oxford University Press 2013).

Sen A, 'Moral Codes and Economic Success' in Brittan S and Hamlin A (eds), *Market Capitalism and Moral Values: Proceedings of Section F (Economics) of the British Association for the Advancement of Science, Keele, 1993* (Edward Elgar 1995).

Sinnott-Armstrong W, 'Consequentialism' in Zalta EN (ed), *The Stanford Encyclopedia of Philosophy* (rev edn, Stanford University 2015) <https://goo.gl/sp4sbP> accessed 29 September 2020).

Smith A, 'The Theory of Moral Sentiments' in Raphael DD and Macfie AL (eds) *The Glasgow Edition of the Works and Correspondence of Adam Smith,* vol 1 (first published in 1790, Oxford University Press 1976).

—— 'Lectures on Jurisprudence' in Meek RL, Raphael DD and Stein PG (eds), *The Glasgow Edition of the Works and Correspondence of Adam Smith*, vol 5 (first published 1762, Clarendon Press 1978.

Spulber DF, *Market Microstructure: Intermediaries and the Theory of the Firm* (Cambridge University Press 1999).

Sokol DD, 'Antitrust, Industrial Policy, and Economic Populism' in Gerard D and Lianos I (eds), *Reconciling Efficiency and Equity: A Global Challenge for Competition Policy* (Cambridge University Press 2019).

Srnicek N, *Platform Capitalism* (Polity Press 2017).

Steiner RL, 'Cooperation, Competition and Collusion Among Firms at Successive Stages' in Cucinotta A, Pardolesi R and Van den Bergh R (eds), *Post-Chicago Developments in Antitrust Law* (Edward Elgar 2002).

Stewart J, *Public Policy Values* (Palgrave Macmillan 2009).

Stiglitz JE, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent* (W W Norton & Company 2019).

Stucke ME and Grunes AP, *Big Data and Competition Policy* (Oxford University

Press 2016).

—— and Ezrachi A, *Competition Overdose. How Free Market Mythology Transformed Us from Citizen Kings to Market Servants* (HarperCollins 2020).

Sullivan LA and Grimes WS, *The Law of Antitrust: An Integrated Handbook* (2nd ed, Thomson West 2006).

Suzumura K, 'Competition, Welfare, and Competition Policy' in Schmidt U and Traub S (eds), *Advances in Public Economics: Utility, Choice and Welfare. A Festschrift for Christian Seidl* (Springer 2005).

Thomas S, '*Ex Ante* and *Ex Post* Control of Buyer Power' in Di Porto F and Podszun R (eds), *Abusive Practices in Competition Law* (Edward Elgar 2018).

Tirole J, *Economics for the Common Good* (Rendall S tr, Princeton University Press 2017).

Townley C, *A Framework for European Competition Law: Co-ordinated Diversity* (Hart Publishing 2018).

Trebilcock MJ, *The Limits of Freedom of Contract* (Harvard University Press 1993).

Tychsen A, Hitchens M, Brolund T and Kavakli M, 'The Game Master' in Pisan Y (ed) *Proceedings of the Second Australasian Conference on Interactive Entertainment* (Creativity & Cognition Studios Press 2005).

Ullrich H, 'Intellectual Property, Access to Information and Antitrust: Harmony, Disharmony, and International Harmonization' in Dreyfuss RC, Zimmerman DL and First H (eds), *Expanding the Boundaries of Intellectual Property. Innovation Policy for the Knowledge Society* (Oxford University Press 2001).

Van den Bergh R, *Comparative Competition Law and Economics* (Edward Elgar 2017).

Van Horn R, 'Reinventing Monopoly and the Role of Corporations. The Roots of Chicago Law and Economics' in Mirowski P and Plehwe D (eds), *The Road from Mont Pèlerin: The Making of the Neoliberal Thought Collective* (Harvard University Press 2009).

Van Rompuy B, *Economic Efficiency: The Sole Concern of Modern Antitrust Policy? Non-Efficiency Considerations within Article 101 TFEU* (Kluwer Law International 2012).

Vanberg VJ, 'Consumer Welfare, Total Welfare and Economic Freedom – On the Normative Foundations of Competition Policy' in Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the Economic Approach* (Edward Elgar 2011).

Wadlow C, 'Unfair Competition by Misappropriation: The Reception of International News in the Common Law World' in Ng CW, Bently L and D'Agostino G (eds), *The Common Law of Intellectual Property. Essays in Honour of Professor David Waver* (Hart Publishing 2010).

Wagner-von Papp F, 'Unilateral Conduct by Non-Dominant Firms: A Comparative Reappraisal' in Di Porto F and Podszun R (eds), *Abusive Practices in Competition Law* (Edward Elgar 2018).

Waldfogel J, *Digital Renaissance. What Data and Economics Tell Us about the Future of Popular Culture* (Princeton University Press 2018).

Walker DA, 'Early General Equilibrium Economics: Walras, Pareto, and Cassel' in Samuels WJ, Biddle JE and Davis JB (eds), *A Companion to the History of*

Economic Thought (Blackwell Publishing 2003).

Walzer M, *Spheres of Justice: A Defense of Pluralism and Equality* (Basic Books 1983).

Weatherill, S, 'The Challenge of Better Regulation' in Weatherill S (ed), *Better Regulation* (Hart Publishing 2007).

Weil D, *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It* (Harvard University Press 2014).

Werden GJ, 'Consumer Welfare and Competition Policy' in Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the Economic Approach. Foundations and Limitations* (Edward Elgar 2011).

Wertheimer A, *Coercion* (Princeton University Press 1987).

Williams B, 'The Idea of Equality' in Pojman LP and Westmoreland R (eds), *Equality: Selected Readings* (Oxford University Press 1997).

Willis J, *The Mind of a Journalist: How Reporters View Themselves, Their World, and Their Craft* (SAGE 2010).

Wu T, *The Curse of Bigness. Antitrust in the New Gilded Age* (Columbia Global Reports 2018).

Zimmer D, 'Consumer Welfare, Economic Freedom and the Moral Quality of Competition Law – Comments on Gregory Werden and Victor Vanberg' in Drexl J, Kerber W and Podszun R (eds), *Competition Policy and the Economic Approach* (Edward Elgar 2011a).

—— 'Protection of Competition v. Maximizing (Consumer) Welfare' in Basedow J and Wurmnest W (eds), *Structure and Effects in EU Competition Law. Studies on Exclusionary Conduct and State Aid* (Kluwer Law International 2011b).

—— 'The Basic Goal of Competition Law: To Protect the Opposite Side of the Market' in Zimmer D (ed), *The Goals of Competition Law* (Edward Elgar 2012).

JOURNAL ARTICLES

Abhishek V, Jerath K and Zhang ZJ, 'Agency Selling or Reselling? Channel Structures in Electronic Retailing' [2016] Management Science 2259.

Aghion P, Bloom N, Blundell R, Griffith R and Howitt P, 'Competition and Innovation: An Inverted-U Relationship' [2005] Quarterly Journal of Economics 701.

Ahdar R, 'Consumers, Redistribution of Income and the Purpose of Competition Law' [2002] European Competition Law Review 341.

Akerlof GA, 'Sins of Omission and the Practice of Economics' [2020] Journal of Economic Literature 405.

Akman P, '"Consumer" versus "Customer": The Devil in the Detail' [2010] Journal of Law and Society 315.

—— 'The Relationship Between Economic Duress and Abuse of a Dominant Position' [2014] Lloyd's Maritime and Commercial Law Quarterly 99.

—— 'The Theory of Abuse in Google Search: A Positive and Normative Assessment under EU Competition Law' [2017] Journal of Law, Technology and Policy 301.

—— ‘An Agenda for Competition Law and Policy in the Digital Economy’ [2019] Journal of European Competition Law & Practice 589.

Alexander LA, ‘Zimmerman on Coercive Wage Offers’ [1983] Philosophy & Public Affairs 160.

Aloisi A, ‘Commoditized Workers: Case Study Research on Labor Law Issues Arising from a Set of on-Demand/Gig Economy Platforms’ [2016] Comparative Labor Law & Policy Journal 653.

Amelio A, Buettner T, Hariton C and others, ‘Recent Developments at DG Competition: 2017/2018’ [2018] Review of Industrial Organization 653.

Anderson E, ‘What Is the Point of Equality?’ [1999] Ethics 287.

Andriychuk O, ‘Rediscovering the Spirit of Competition: on the Normative Value of the Competitive Process’ [2010] European Competition Journal 575.

Armstrong M, ‘Competition in Two-Sided Markets’ [2006] RAND Journal of Economics 668.

Areeda PE, ‘Antitrust Violations without Damage Recoveries’ [1976] Harvard Law Review 1127.

Arneson R, ‘Equality and Equal Opportunity for Welfare’ [1989] Philosophical Studies 77.

—— ‘Equality of Opportunity: Derivative Not Fundamental’ [2013] Journal of Social Philosophy 316.

Arnold T, ‘The Effectiveness of the Federal Antitrust Laws: A Symposium’ [1949] The American Economic Review 689.

Auer D and Petit N, ‘Two-Sided Markets and the Challenge of Turning Economic Theory into Antitrust Policy’ [2015] Antitrust Bulletin 426.

—— ‘Two Systems of Belief about Monopoly: The Press vs. Antitrust’ [2019] Cato Journal 99.

Averitt NW and Lande RH, ‘Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law’ [1997] Antitrust Law Journal 713.

—— ‘Using the Consumer Choice Approach to Antitrust Law’ [2007] Antitrust Law Journal 175.

Ayal A, ‘The Market for Bigness: Economic Power and Competition Agencies Duty to Curtail it’ [2013] Journal of Antitrust Enforcement 221.

Baarsma BE, ‘Rewriting European Competition Law from an Economics Perspective’ [2011] 559.

Bailey D, ‘The New Frontiers of Article 102 TFEU: Antitrust Imperialism or Judicious Intervention’ [2018] Journal of Antitrust Enforcement 25.

Baird DG, ‘Common Law Intellectual Property and the Legacy of International News Service v. Associated Press’ [1983] University of Chicago Law Review 411.

Balganesh, ‘“Hot News”: The Enduring Myth of Property in News’ [2011] Columbia Law Review 419.

Barnett JM, ‘The Costs of Free: Commoditization, Bundling and Concentration’ [2018] Journal of Institutional Economics 1097.

Barnett TO, ‘Section 2 Remedies: What to do After Catching the Tiger by the Tail’ [2009]

Antitrust Law Journal 31.

Basu K, 'Coercion, Contract and the Limits of the Market' [2007] Social Choice and Welfare 559.

Belhadj N, Laussel D and Resende J, 'Marketplace or Reselling? A Signalling Model' [2020] Information Economics and Policy 100834.

Benkler Y, 'Degrees of Freedom, Dimensions of Power' [2016] Dædalus 18.

Benson P, 'Analyzing Oppression by Ann E. Cudd' [2009] Hypatia 178.

Bernhard RC, 'Competition in Law and in Economics' [1967] Antitrust Bull 1099.

Berta N, Julien LA and Tricou F, 'On Perfect Competition: Definitions, Usages and Foundations' [2012] Papers in Political Economy 7.

Besanko D and Spulber DF, 'Contested Mergers and Equilibrium Antitrust Policy' [1993] Journal of Law, Economics & Organization 1.

Bethell OJ, Baird GN and Waksman AM, 'Ensuring Innovation through Participative Antitrust' [2020] Journal of Antitrust Enforcement 30.

Biglaiser G, Calvano E and Crémer J, 'Incumbency Advantage and its Value' [2019] Journal of Economic & Management Strategy 41.

Blair RD and Sokol DD, 'Welfare Standards in U.S. and E.U. Antitrust Enforcement' [2013] Fordham Law review 2497.

Blaug M, 'The Fundamental Theorems of Modern Welfare Economics, Historically Contemplated' [2007] History of Political Econoomy 185.

Böhm F, 'Die Kampfansage an Ordnungstheorie und Ordnungspolitik. Zu einem Aufstaz im Kyklos' [1973] ORDO: Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft 11.

Bonefeld W, 'Adam Smith and Ordoliberalism: On the Political Form of Market Liberty' [2013] Review of International Studies 233.

Bork RH and Sidak JG, 'What Does the Chicago School Teach About Internet Search and the Antitrust Treatment of Google?' [2012] Journal of Competition Law & Economics 663.

Boudreau KJ, 'Platform Boundary Choices & Governance: Opening-Up while Still Coordinating and Orchestrating [2017] Entrepreneurship, Innovation, and Platforms 227.

Bougette P, Budzinski O and Marty F, 'Exploitative Abuse and Abuse of Economic Dependence: What Can we Learn From an Industrial Organization Approach' [2019] Revue d'économie politique 261.

Brennan TJ, 'Is Complexity in Antitrust a Virtue? The Accuracy-Simplicity Tradeoff' [2014] Antitrust Bulletin 827.

—— 'Should Antitrust Go Beyond "Antitrust"?' [2018] Antitrust Bulletin 49.

Brewbaker III WS, 'Will Physician Unions Improve Health System Performance?' [2002] Journal of Health Politics, Policy & Law 575.

Brietzke PH, 'Book Review. Robert Bork, The Antitrust Paradox: A Policy at War with Itself' [1979] Valparaiso University Law Review 403.

—— 'The Constitutionalization of Antitrust: Jefferson, Madison, Hamilton, and Thomas

C. Arthur Hamilton, and Thomas C. Arthur' [1988] Valparaiso University Law Review 275.

Brodley JF, 'The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress' [1987] New York University Law Review 1020.

Budzinski O, 'Monoculture Versus Diversity in Competition Economics' [2008] Cambridge Journal of Economics 295.

—— and Köhler KH, 'Is Amazon the Next Google?' [2015] ORDO: Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft 265.

Bulmash H,' An Empirical Analysis of Secondary Line Price Discrimination Motivations' [2012] Journal of Competition Law & Economics 361.

Burns JW, 'The New Role of Coercion in Antitrust' [1991] Fordham Law Rev 379.

Buttà A and Pezzoli A, 'Buyer Power and Competition Policy: From Brick-And-Mortar Retailers to Digital Platforms' [2014] Economia e Politica Industriale 159.

Callmann R, 'What is Unfair Competition' [1940] Georgetown Law Journal 585.

—— 'He Who Reaps Where He Has Not Sown: Unjust Enrichment in the Law of Unfair Competition' [1942] Harvard Law Review 595.

Calo R and Rosenblat A, 'The Taking Economy: Uber, Information, and Power' [2017] Columbia Law Review 1623.

Calvano E and Polo M, 'Market Power, Competition and Innovation in Digital Markets: A Survey' [2020] Information Economics and Policy (forthcoming).

Calzada J and Gil R, 'What Do News Aggregators Do? Evidence from Google News in Spain and Germany' [2020] Marketing Science 134.

Carlton DW, 'Does Antitrust Need to Be Modernized?' [2007] Journal of Economic Perspectives 155.

Carrier MA, 'Only "Scraping" the Surface: the Copyright Hold in the FTC's Google Settlement' [2013] UBC Law Review 750.

Carroll A, 'Don't Be Evil – Unless it Increases Revenue: What the Operation of Credit Rating Agencies Can Teach Us about Google' [2012] Temple Journal of Science, Technology and Environmental Law 93.

Carstens DW, 'Preemption of Direct Molding Statutes: Bonito Boats v. Thunder Craft Boats' [1990] Harvard Journal of Law & Technology 167.

Cass RA, 'Antitrust for High-Tech and Low: Regulation, Innovation, and Risk' [2013] Journal of Law, Economics and Policy 169.

Catalini C and Tucker CE, 'Antitrust and Costless Verification: An Optimistic and a Pessimistic View of the Implications of Blockchain Technology [2019] Antitrust Law Journal 861.

Catricalà A, 'Google in Italy…' [2011] Journal of European Competition Law & Practice 293.

Caves K and Singer H, 'When the Econometrician Shrugged: Identifying and Plugging Gaps in the Consumer-Welfare Standard' [2018] George Mason Law Review 395.

Chambers C, 'Each Outcome is Another Opportunity: Problems with the Moment of Equal Opportunity' [2009] politics, philosophy & economics 374.

Cherry M, ‘Beyond Misclassification: The Digital Transformation of Work’ [2016] Comparative Labor Law & Policy Journal 577.

Chiou L and Tucker C, ‘Content Aggregation by Platforms: The Case of the News Media’ [2017] Journal of Economics & Management Strategy 782.

Choi JP, Lee G and Stefanadis C, ‘The Effects of Integration on R&D Incentives in Systems Markets’ [2003] Netnomics 21.

Choi JP and Jeon D-S, ‘A Leverage Theory of Tying in Two-Sided Markets with Non-Negative Price Constraints’ [2020] American Economic Journal: Microeconomics (forthcoming).

Chyi HI, Lewis SC and Zheng N, ‘Parasite or Partner? Coverage of Google News in an Era of News Aggregation’ [2016] Journalism & Mass Communications Quarterly 789.

Cohen GA, ‘On the Currency of Egalitarian Justice’ [1989] Ethics 906.

Cohen JE, ‘Cyberspace As/And Space’ [2007] Columbia Law Review 210.

—— ‘Property as Institutions for Resources: Lessons from and for IP’ [2015] Texas Law Review 1.

—— ‘Law for the Platform Economy’ [2017] University of California, Davis Law Review 133.

Cole S, ‘The Hierarchy of the Sciences?’ [1983] American Journal of Sociology 111.

Colomo PI, ‘On the Application of Competition Law as Regulation: Elements for a Theory’ [2012] Yearbook of European Law 261.

—— ‘Restrictions on Innovation n EU Competition Law [2016] European Law Review 201.

—— ‘Indispensability and Abuse of Dominance: From Commercial Solvents to Slovak Telekom and Google Shopping’ [2019] Journal of Competition Law & Practice 532.

—— and Kalintiri A, ’The Evolution of EU Antitrust Policy: 1966–2017’ [2020] Modern Law Review 321.

Constantinides P, Henfridsson O and Parker GG, ‘Platforms and Infrastructures in the Digital Age’ [2018] Information Systems Research 381.

Crane DA, ‘Ecosystem Competition and the Antitrust Laws’ [2019] Nebraska Law Review 412.

da Cruz Vilaça J L, ‘The Intensity of Judicial Review in Complex Economic Matters—Recent Competition Law Judgments of the Court of Justice of the EU’ [2018] Journal of Antitrust Enforcement 173.

Dahl R, ‘The Concept of Power’ [1957] Behavioral Science 201.

Daniels N, ‘Merit and Meritocracy’ [1978] Philosophy & Public Affairs 206.

Darcy D, ‘Credit Rating Agencies and the Credit Crisis: How the Issuer Pays Conflict Contributed and What Regulators Might Do about It’ [2009] Columbia Business Law Review 605.

Das Acevedo D, ‘Unbundling Freedom in the Sharing Economy [2018] Southern California Law Review 793.

Daskalova V, ‘Regulating the New Self-Employed in the Uber Economy: What Role for

EU Competition Law?' [2018] German Law Journal 461.

Datta H, Knox G and Bronnenberg BJ, 'Changing Their Tune: How Consumers' Adoption of Online Streaming Affects Music Consumption and Discovery' [2017] Marketing Science 5.

de Reuver M, Sørensen C and Basole R C, 'The Digital Platform: A Research Agenda' [2017] Journal of Information Technology 124.

Dehdashti SA, 'B2B Unfair Trade Practices and EU Competition Law' [2018] European Competition Journal 305.

Dellarocas C, Katona Z and Rand W, 'Media, Aggregators, and the Link Economy: Strategic Hyperlink Formation in Content Networks' [2013] Management Science 2360.

—— Sutanto J, Calin M and Palme E, 'Attention Allocation in Information-Rich Environments: The Case of News Aggregators' [2016] Management Science 2457.

Deutscher E and Makris S, 'Exploring the Ordoliberal Paradigm: The Competition Democracy Nexus' [2016] Competition Law Review 181.

Devlin M and Peixoto B, 'Reformulating Antitrust Rules to Safeguard Societal Wealth [2008] Stanford Journal of Law, Business & Finance 225.

Director A, 'The Parity of the Economic Market Place' [1964] The Journal of Law & Economics 1.

Dube A, Jacobs J, Naidu S and Suri S, 'Monopsony in Online Labor Markets' [2020] American Economic Review: Insights 33.

Ducci F, 'Procedural Implications of Market Definition in Platform Cases' [2019] Journal of Antitrust Enforcement 419.

Duhamel M and Townley PG, 'An Effective and Enforceable Alternative to the Consumer Surplus Standard' [2003] World Competition Law and Economics Review 3.

Dworkin R, 'What is Equality? Part 2: Equality of Resources' [1981] Philosophy & Public Affairs 283.

—— 'In Praise of Theory' [1997] Arizona State Law Journal 353.

Eaton B, Elaluf-Calderwood S, Sørensen C and Yoo Y, 'Distributed tuning of boundary resources: the case of Apple's iOS service system' [2015] Management Information Systems Quarterly 217.

Edelman B, 'Bias in Search Results?: Diagnosis and Response' [2011] The Indian Journal of Law and Technology 16.

—— 'Using Internet Data for Economic Research' [2012] Journal of Economic Perspectives 189.

Einav L, Farronato C and Levin J, 'Peer-to-Peer Markets' [2016] Annual Review of Economics 615.

Einstein A, 'On the Method of Theoretical Physics' [1934] Philosophy of Science 163.

Eisenmann T, Parker G and Van Alstyne M, 'Platform Envelopment' [2011] Strategic Management Journal 1270.

Elhauge E, 'Disgorgement as an Antitrust Remedy' [2009] Antitrust Law Journal 79.

Ely RT, 'Competition: Its Nature, Its Permanency, and Its Beneficence' [1901] American

Economic Association 55.

Evans DS, 'Governing Bad Behavior by Users of Multi-Sided Platforms' [2012] Berkeley Technology Law Journal 1201.

Ezrachi A, 'Sponge' [2017] Journal of Antitrust Enforcement 49.

Farrell J and Katz ML, 'Innovation, Rent Extraction, and Integration in Systems Markets' [2000] Journal of Industrial Economics 413.

—— 'The Economics of Welfare Standards in Antitrust' [2006] Competition Policy International Journal 3.

Fengler S and Russ-Mohl S, 'The Crumbling Hidden Wall: Towards an Economic Theory of Journalism' [2008] Kyklos 520.

Fèvre R, 'Le Marché Sans Pouvoir : Au Cœur du Discours Ordolibérale' [2017] Revue d'économie politique 119.

Fleurbaey M, 'Equal Opportunity or Equal Social Outcome?' [1995] Economics and Philosophy 25.

—— 'The Facets of Exploitation' [2014] Journal of Theoretical Politics 653.

Foer AA, 'Civil Liberties and Competition Policy: A Personal Essay Dedicated to John J. Flynn' [2011] Antitrust Bulletin 731.

Foerderer J, Kude T, Mithas S and Heinzl A, 'Does Platform Owner's Entry Crowd Out Innovation? Evidence from Google Photos' [2018] Information Systems Research 444.

Fontaine P, 'Free Riding' [2014] Journal of the History of Economic Thought 359.

Foros Ø, Kind HJ and Shaffer G, 'Apple's Agency Model and the Role of Most-Favored-Nation Clauses' [2017] RAND Journal of Economics 673.

Fourcade M, Ollion E and Algan Y, 'The Superiority of Economics' [2015] Journal of Economics Perspectives 89.

Fox EM, 'Modernization of Antitrust: A New Equilibrium' [1981] Cornell Law Review 1140.

—— 'Against Goals' [2013] Fordham Law Review 2157.

Frankel C, 'Equality of Opportunity' [1971] Ethics 191.

Frison-Roche M-A, 'L'Apport de la Notion d'"Entreprise Cruciale" à la Régulation des Plateformes' [2015] Concurrences 1.

Gaudin G, 'Vertical Bargaining and Retail Competition: What Drives Countervailing Power?' [2017] The Economic Journal 2380.

Gavil AI, 'Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice' [2012] Southern California Law Review 733.

Gawer A and Henderson R, 'Platform Owner Entry and Innovation in Complementary Markets: Evidence from Intel' [2007] Journal of Economics & Management Strategy 1.

Geiger C, Bulayenko O and Frosio F, 'The Introduction of a Neighbouring Right for Press Publisher at EU Level: The Unneeded (and Unwanted) Reform' [2017] European Intellectual Property Review 202.

Geradin D, 'Complements and/or Substitutes? The Competitive Dynamics Between News

Publishers and Digital Platforms and What It Means for Competition Policy' [2019] Antitrust & Public Policies 0 <https://bit.ly/3fyF9i9> accessed 29 September 2020.

Gerbrandy A, 'Rethinking Competition Law within the European Economic Constitution' [2019] Journal of Common Market Studies 127.

Gilbert RJ, 'E-books: A Tale of Digital Disruption [2015] Journal of Economic Perspectives 165.

Giocoli N, 'Competition Versus Property Rights: American Antitrust Law, the Freiburg School, and the Early Years of European Competition Policy' [2009] Journal of Competition Law & Economics 747.

Graef I, 'Differentiated Treatment in Platform-to-Business Relations: EU Competition Law and Economic Dependence' [2019] Yearbook of European Law 448.

Graham M, Hjorth I and Lehdonvirta V, 'Digital Labour and Development: Impacts of Global Digital Labour Platforms and the Gig Economy on Worker Livelihoods' [2017] Transfer 135.

Grimes WS, 'Antitrust Law as a Response to Economic Oppression: The United States' Experience' [1997] Nihon University Comparative Law 113.

Guildea B, 'App Stores: A Digital No Man's Land or Innovation's Bane?' [2016] Journal of Intellectual Law & Practice 445.

Hafiz H, 'Beyond Liberty: Toward a History and Theory of Economic Coercion' [2016] Tennessee Law Review 1071.

Hagiu A and Spulber D, 'First-Party Content and Coordination in Two-Sided Markets [2013] Management Science 933.

—— and Wright J, 'Marketplace or Reseller' [2015] Management Science 184.

Hale RL, 'Coercion and Distribution in a Supposedly Non-Coercive State' [1923] Political Science Quarterly 470.

Hammer PJ, 'Antitrust Beyond Competition: Market Failures, Total Welfare, and the Challenge of Intramarket Second-Best Tradeoffs' [2000] Michigan Law Review 849.

Hawley AJ, 'Regulating Labour Platforms, the Data Deficit' [2018] European Journal of Government and Economics 5.

Hayek FA, 'Der Wettbewerb als Entdeckungsverfahren' [1968] Kieler Vorträge 1.

—— 'Competition as a Discovery Procedure' (tr Snow MS) [2002] Quarterly Journal of Austrian Economics 9.

Helllstrom P and Maier-Rigaud F and Wenzel Bulst F, 'Remedies in European Antitrust Law' [2009] Antitrust Law Journal 43

Herzog B, 'Valuation of Digital Platforms: Experimental Evidence for Google and Facebook' [2018] International Journal of Financial Studies 87.

Heyer K, Welfare Standards and Merger Analysis: Why not the Best' [2006] Competition Policy International Journal 29.

Hicks JR, 'Annual Survey of Economic Theory: The Theory of Monopoly' [1935] Econometrica 1.

—— 'The Foundations of Welfare Economics' [1939] The Economic Journal 696.

Hirschey JK, ‘Symbiotic Relationships: Pragmatic Acceptance of Data Scraping’ [2014] Berkeley Technology Law Journal 897.

Hjelmeng E, ’Competition Law Remedies: Striving for Coherence or Finding New Ways?’ [2013] Common Market Law Review 1007.

Höppner T, ‘Google: Friend or Foe of Ad-Financed Content Providers?’ [2013] Journal of Media Law 14.

—— ‘CREATe Public Lectures on the Proposed EU Right for Press Publishers. EU Copyright Reform – The Case for a Related Right for Press Publishers’ [2017] European Intellectual Property Review 607.

Horton TJ, ‘Fairness and Antitrust Reconsidered: An Evolutionary Perspective’ [2013] McGeorge Law Review 823.

Hou L, ‘Superior Bargaining Power: The Good, the Bad and the Ugly’ [2019] Asia Pacific Law Review 39.

Hovenkamp E, ‘Platform Antitrust’ [2019] Journal of Corporation Law 713.

Hovenkamp H, ‘The First Great Law & Economics Movement [1990] Stanford Law Review 993.

—— ‘Exclusive Joint Ventures and Antitrust Policy’ [1995] Columbia Business Law Review 1.

—— ‘Implementing Antitrust’s Welfare Goals’ [2013] Fordham Law Review 2471.

—— ‘Progressive Antitrust’ [2018] University of Illinois Law Review 71.

—— ‘Platforms and the Rule of Reason: The *American Express* Case’ [2019] Columbia Business Law Review 101.

Hugenholtz PB, ‘Neighbouring Rights are Obsolete’ [2019] International Review of Intellectual Property and Competition 1006.

Hughes EJ, ‘The Left Side of Antitrust: What Fairness Means and Why it Matters’ [2009] Marquette Law Review 265.

Hunold M, Kesler R and Laitenberger U, ‘Rankings of Online Travel Agents, Channel Pricing, and Consumer Protection’ [2020] Marketing Science 92.

—— Kesler R, Laitenberger U and Schlütter F, ‘Evaluation of Best Price Clauses in Online Hotel Bookings’ [2018] International Journal of Industrial Organization 542.

Iacobucci E and Ducci F, ‘The Google Search Case in Europe: Tying and the Single Monopoly Profit Theorem in Two-Sided Markets’ [2019] European Journal of Law & Economics 15.

Irani L, ‘Difference and Dependence among Digital Workers: The Case of Amazon Mechanical Turk’ [2015] South Atlantic Quarterly 225.

Jeon D-S and Rochet J-C, ‘The Pricing of Academic Journals: A Two-Sided Market Perspective’ [2010] American Economic Journal: Microeconomics 222.

—— and Nasr N, ‘News Aggregators and Competition among Newspapers on the Internet’ [2016] American Economic Journal: Microeconomics 91.

Jiang B, Jerath K and Srinivasan K, ‘Firm Strategies in the “Mid Tail” of Platform-Based Retailing’ [2011] Marketing Science 757.

Johnson EE, 'The Economics and Sociality of Sharing Intellectual Property Rights' [2014] Boston University Law Review 1935.

Johnson JP, 'The Agency Model and MFN Clauses' [2017] Review of Economic Studies 115.

—— 'The Agency and Wholesale Models in Electronic Content Markets' [2020] International Journal of Industrial Organization 1.

Kang HY, 'Intra-Platform Envelopment: The Coopetitive Dynamics Between the Platform Owner and Complementors' [2017] Academy of Management Proceedings 11205.

Kaplow L, 'Rules Versus Standards: An Economic Analysis' [1992] Duke Law Journal 557.

—— 'Why (Ever) Define Markets?' [2010] Harvard Law Review 438.

—— and Shavell S, 'Fairness Versus Welfare' [2001] Harvard Law Review 961.

Kathuria V and Globocnik J, 'Exclusionary Conduct in Data-Driven Markets: Limitations of Data Sharing Remedy' [2020] Journal of Antitrust Enforcement 0 <https://doi.org/10.1093/jaenfo/jnz036> accessed 29 September 2020.

Katsoulacos Y, 'On the Concepts of Legal Standards and Substantive Standards (and How the Latter Influences the Choices of the Former)' [2019a] Journal of Antitrust Enforcement 365.

—— 'On the Choice of Legal Standards: A Positive Theory for Comparative Analysis' [2019b] European Journal of Law and Economics 125.

—— Avdashevab S and Golovan S, 'Legal Standards and the Role of Economics in Competition Law Enforcement' [2016] European Competition Journal 277.

Katz LF and Krueger AB, 'The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015' [2019] ILR Review 382.

Katz ML and Shapiro C, 'Network Externalities, Competition, and Compatibility' [1985] American Economic Review 424.

Kenney M and Zysman J, 'Unicorns, Cheshire Cats, and the New Dilemmas of Entrepreneurial Finance' [2019] Venture Capital 35.

Kerber W and Vezzoso S, 'EU Competition Policy, Vertical Restraints, and Innovation: An Analysis From an Evolutionary Perspective' [2005] World Competition Law and Economics Review 507.

Kerwer D, 'Holding Global Regulators Accountable: The Case of Credit Rating Agencies' [2005] Governance: An International Journal of Policy, Administration, and Institutions 453.

Keynes JM, 'National Self-Sufficiency' [1933] Studies: An Irish Quarterly Review 177.

Khan LM, 'Amazon's Antitrust Paradox' [2017] Yale Law Journal 712.

—— 'Sources of Tech Platform Power' [2018] Georgetown Law Technology Review 325.

—— 'The Separation of Platforms and Commerce' [2019] Columbia Law Review 973.

Kim H and Luca M, 'Product Quality and Entering Through Tying: Experimental Evidence' [2019] Management Science 596.

Kim K, Baek C and Lee J-D, 'Creative Destruction of the Sharing Economy in Action: The

Case of Uber' [2018] Transportation Research 118.

Kirkwood JB, 'The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency [2008] Notre Dame Law Review 191.

—— 'Collusion to Control a Powerful Customer: Amazon, E-Books, and Antitrust Policy' [2014] University of Miami Law Review 1.

—— 'Reforming the Robinson-Patman Act to Serve Consumers and Control Powerful Buyers' [2015] Antitrust Bulletin 358.

Kovacic WE, 'Designing Antitrust Remedies for Dominant Firm Misconduct' [1999] Connecticut Law Review 1285.

Krämer J and Schnurr D, 'Is There a Need for Platform Neutrality Regulation in the EU?' [2018] Telecommunications Policy 514.

Kreis AM and Christensen RK, 'Law and Public Policy' [2013] Policy Studies Journal 38.

Kretchmar S, 'A Phenomenology of Competition' [2014] Journal of the Philosophy of Sport 21.

Kronman AT, 'Contract Law and Distributive Justice' [1980] Yale Law Journal 472.

Lamadrid de Pablo A, 'The Double Duality of Two-Sided Markets' [2015] Comp Law 5.

—— 'Competition Law as Fairness' [2017] Journal of Competition Law & Practice 147.

Lan S, Liu K and Dong Y, 'Dancing with Wolves: How Value Creation and Value Capture Dynamics Affect Complementor Participation in Industry Platforms' [2019] Industry and Innovation 943.

Lande RH, 'Consumer Choice as the Ultimate Goal of Antitrust' [2001] University of Pittsburgh Law Review 503.

Lao M, 'Ideology Matters in the Antitrust Debate' [2014] Antitrust Law Journal 649.

—— 'Workers in the "Gig" Economy: The Case for Extending the Antitrust Labor Exemption' [2018] University of California, Davis Law Review 1543.

Larmore C, 'Liberal and Republican Conceptions of Freedom' [2003] Critical Review of International Social and Political Philosophy 96.

Lemley MA, 'Property, Intellectual Property and Free Riding' [2005] Texas Law Review 1031.

Lerner AP, 'The Concept of Monopoly and the Measurement of Monopoly Power' [1934] The Review of Economic Studies 157.

Lettl T, 'Missbräuchliche Ausnutzung einer Marktbeherrschenden Stellung nach Art. 102 AEUV, § 19 GWB und Rechtsbruch' [2016] Wirtschaft und Wettbewerb 214.

Lianos I, 'Competition Law for a Complex Economy' [2019] International Review of Intellectual Property and Competition Law 643.

—— Countouris N and De Stefano V, 'Re-Thinking the Competition Law/Labour Law Interaction: Promoting a Fairer Labour Market' [2019] European labour Law Journal 291.

Li Z and Agarwal A, 'Platform Integration and Demand Spillovers in Complementary Markets: Evidence from Facebook's Integration of Instagram' [2017] Management Science 3438.

Liebeler WJ, 'Resale Price Maintenance and Consumer Welfare: Business Electronics

Corp. v. Sharp Electronics Corp.' [1989] University of California, Los Angeles Law Review 889.

Liu X, 'Vertical Integration and Innovation' [2016] International Journal of Industrial Organization 88.

Lukes S, 'The Singular and the Plural: On the Distinctive Liberalism of Isaiah Berlin' [1994] Social Research 687.

Makris SS, 'Applying Normative Theories in EU Competition Law: Exploring Article 102 TFEU' [2014] University College London Journal of Law and Jurisprudence 30.

Malin BJ and Chandler C, 'Free to Work Anxiously: Splintering Precarity Among Drivers for Uber and Lyft' [2017] Communication, Culture & Critique 382.

Malin MH, 'Protecting Platform Workers in the Gig Economy: Look to the FTC [2018] Indiana Law Review 377.

Manne GA and Wright JD, 'Google and the Limits of Antitrust: The Case Against the Case Against Google' [2011] Harvard Journal of Law & Public Policy 171.

May J, 'Antitrust in the Formative Era: Political and Economic Theory in Constitutional and Antitrust Analysis, 1880-1918 [1989] Ohio State Law Journal 257.

McIntyre DP and Srinivasan A, 'Networks, Platforms, and Strategy: Emerging Views and Next Steps' [2016] Strategic Management Journal 141.

McNulty PJ, 'Economic Theory and the Meaning of Competition' [1968] Quarterly Journal of Economics 639.

Melamed D, 'Afterword: The Purposes of Antitrust Remedies [2009] Antitrust Law Journal 359.

—— and Petit N, 'The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets' [2019] Review of Industrial Organization 741.

Mérel P and Sexton RJ, 'Buyer Power with Atomistic Upstream Entry: Can Downstream Consolidation Increase Production and Welfare?' [2017] International Journal of Industrial Organization 259.

Miller DA, 'Invention Under Uncertainty and the Threat of Ex Post Entry' [2008] European Economic Review 387.

Moglia ML, Nguyen HV, Chyjek K, Chen KT and Castaño PM, 'Evaluation of Smartphone Menstrual Cycle Tracking Applications Using an Adapted APPLICATIONS Scoring System' [2016] Obstetrics & Gynecology 1153.

Mosquera R, Odunowo M, McNamara T, Guo X and Petrie R, 'The Economic Effects of Facebook' [2020] 575.

Nachbar TB, 'The Antitrust Constitution' [2013] Iowa Law Review 57.

Naidu S, Posner E A, Weyl G, 'Antitrust Remedies for Labor Market Power' [2018] Harvard LRev 536.

Nazzini R, 'Google and the (Ever-stretching) Boundaries of Article 102 TFUE' [2015] Journal of European Competition Law & Practice 301.

Neven D and Röller L-H, 'Consumer Surplus Vs. Welfare Standard in a Political Economy Model of Merger Control' [2005] International Journal of Industrial Organization 829.

Nihoul P, '"Freedom of Choice": The Emergence of a Powerful Concept in European Competition Law' [2012] Concurrences 55.

Oh J, Koh B and Raghunathan R, 'Value Appropriation Between the Platform Provider and App Developers in Mobile Platform Mediated Networks' [2015] Journal of Information Technology 245.

Ohly A, 'The Freedom of Imitation and Its Limits – A European Perspective' [2010] International Review of Intellectual Property and Competition 506.

Öhman C and Aggarwal N, 'What if Facebook Goes Down? Ethical and Legal Considerations for the Demise of Big Tech' [2020] Internet Policy Review 0 <https://bit.ly/31Hi08o> accessed 29 September 2020.

Orbach BY, 'The Antitrust Consumer Welfare Paradox' [2010] Journal of Competition Law & Economics 133.

—— and Campbell Rebling, 'The Antitrust Curse of Bigness' [2012] Southern California Law Review 605.

Osti C, 'Antitrust: a Heimlich Manoeuvre' [2015] European Competition Journal 221.

Page WH, 'Legal Realism and the Shaping of Modern Antitrust' [1995] Emory Law Journal 1.

Paul SM, 'Uber as For-Profit Hiring Hall: A Price-Fixing Paradox and its Implications' [2017] Berkeley Journal of Employment and Labor Law 233.

Peeperkorn L, 'Conditional Pricing: Why the General Court is Wrong in *Intel* and What the Court of Justice Can Do to Rebalance the Assessment of Rebates' [2015] Concurrences 43.

Peticca-Harris A, de Gama N and Ravishankar M N, 'Postcapitalist Precarious Work and Those in the "Drivers" Seat: Exploring the Motivations and Lived Experiences of Uber Drivers in Canada' [2018] Organization 36.

Petit N, 'Credit Rating Agencies, the Sovereign Debt Crisis and Competition Law' [2011] European Competition Journal 587.

—— 'Intel, Leveraging Rebates and the Goals of Article 102 TFEU' [2015] European Competition Journal 26.

—— 'Analysis and Reflections. Intel and the Rule of Reason in Abuse of Dominance Cases' [2018] European Law Review 728.

Pignataro G, 'Equality of Opportunity: Policy and Measurement Paradigms' [2012] Journal of Economic Surveys 800.

Pihlajarinne T and Vesala T, 'Proposed Right of Press Publishers: A Workable Solution?' [2018] Journal of Intellectual Property Law & Practice 220.

Pitofsky R, 'The Political Content of Antitrust' [1979] University of Pennsylvania Law Review 1051.

Pittman R, 'Consumer Surplus as the Appropriate Standard for Enforcement' [2007] Competition Policy International Journal 205.

Podszun R, 'Can Competition Law Repair Patent Law and Administrative Procedures? AstraZeneca' [2014] Common Market Law Review 281.

Porter M, 'The Five Competitive Forces That Shape Strategy' [2008] Harvard Business

Review 78.

Posner RA, 'An Economic Approach to Legal Procedure and Judicial Administration' [1973] Journal of Legal Studies 399.

—— 'Misappropriation: A Dirge' [2003] Houston Law Review 621.

—— and Landes WM, 'Market Power in Antitrust Cases' [1980] Harvard Law Review 937.

Prassl J and Risak M, 'Uber, Taskrabbit and Co: Platforms as Employers? Rethinking the Legal Analysis of Crowdwork' [2016] Comparative Labor Law & Policy Journal 619.

Prendergast, 'The Concept of Freedom and Its Relation to Economic Development – A Critical Appreciation of the Work of Amartya Sen' [2005] Cambridge Journal of Economics 1145.

Rahman KS, 'Domination, Democracy, and Constitutional Political Economy in the New Gilded Age: Towards a Fourth Wave of Legal Realism' [2016] Texas Law Review 1329.

—— 'Democracy Against Domination: Contesting Economic Power in Progressive and Neorepublican Political Theory' [2017] Contemporary Political Theory 41.

—— 'The New Utilities: Private Power, Social Infrastructure, and The Revival of the Public Utility Concept' [2018] Cardozo Law Review 1621.

—— and Thelen K, 'The Rise of the Platform Business Model and the Transformation of Twenty-First-Century Capitalism' [2019] Politics & Society 177.

Rapp GC, 'Monopoly's Hidden Justice: How Lax Antitrust Enforcement May Stimulate Charitable Giving and Overcome the Political Economy Barriers to Redistributive Taxation', [2001] University of Missouri-Kansas Law Review 303.

Richards JR, 'Equality of Opportunity' [1997] Ratio 253.

Richardson KA, Cilliers P and Lissack M, 'Complexity Science: A "Gray" Science for the "Stuff in Between"' [2001] Emergence 6.

Ritter C, 'Price Discrimination as An Abuse of a Dominant Position Under Article 102 TFEU: MEO' [2019] Common Market Law Review 259.

Ritzer G and Miles S, 'The Changing Nature of Consumption and the Intensification of McDonaldization in The Digital Age' [2019] Journal of Consumer Culture 3.

Roe MJ, 'Backlash' [1998] Columbia Law Review 217.

Roemer JE, 'Defending Equality of Opportunity' [2003] The Monist 261.

—— 'On Several Approaches to Equality of Opportunity' [2012] Economics and Philosophy 165.

Rosas C, 'The Future is Femtech: Privacy and Data Security Issues Surrounding Femtech Applications' [2019] Hastings Business Law Journal 319.

Rosenblat A and Stark L, 'Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers' [2016] International Journal of Communication 3759.

Rule CF and Meyer DL, 'An Antitrust Enforcement Policy to Maximize the Economic Wealth of All Consumers' [1988] Antitrust Bulletin 677.

Salop SC, 'Question: What is the Real and Proper Antitrust Welfare Standard? Answer:

The True Consumer Welfare Standard' [2010] Loy Consumer LRev 336.

Sarkar MB, Butler B and Steinfield C, 'Intermediaries and Cybermediaries: Sarkar, Butler and Steinfield' [1995] Journal of Computer-Mediated Communication 0 <https://bit.ly/2PsVWs6> accessed 29 September 2020.

Scharpf FW, 'Economic Integration, Democracy and the Welfare State' [1997] Journal of European Public Policy 18.

Schmidt H, 'Competition Law and IP Rights: Not So Complementary: Time for Re-alignment of the Goals?' [2019] World Competition Law and Economics Review 451.

Schmitz SW, 'The Effects of Electronic Commerce on the Structure of Intermediation' [2000] Journal of Computer-Mediated Communication 0 <https://bit.ly/33wXDgD> accessed 29 September 2020.

Schrepel T, 'New Structured Rule of Reason Approach for High-Tech Markets' [2017] Suffolk University Law Review 103.

—— 'Antitrust Without Romance' [2020] New York University Journal of Law & Liberty 326.

Schwarz JA, 'Platform Logic: An Interdisciplinary Approach to the Platform-Based Economy' [2017] Policy & Internet 374.

Sen A, 'The Impossibility of a Paretian Liberal' [1970] Journal of Political Economy 152.

Senftleben M, Kerk M, Buiten M and Heine K, 'New Rights or New Business Models? An Inquiry into the Future of Publishing in the Digital Era' [2017] International Review of Intellectual Property and Competition 538.

Shafiei Gol E, Stein M-K and Avital M, 'Crowdwork Platform Governance Toward Organizational Value Creation' [2019] Journal of Strategic Information Systems 175.

Shapiro C, 'Antitrust in a Time of Populism' [2018] International Journal of Industrial Organization 714.

Shapiro I, 'On Non-Domination' [2012] University of Toronto Law Journal 293.

Shelanski HA, 'Information, Innovation, and Competition Policy for the Internet' [2013] University of Pennsylvania Law Review 1663.

—— and Sidak JG, 'Antitrust Divestiture in Network Industries' [2001] University of Chicago Law Review 1.

Smichowski BC, 'Is Ride-Hailing Doomed to Monopoly? Theory and Evidence from the Main U.S. Markets' [2018] Revue d'économie industrielle 43.

Sobel-Read KB, 'Global Value Chains: A Framework for Analysis' [2014] Transnational Legal Theory 364.

Sokol DD, 'Tensions Between Antitrust and Industrial Policy' [2015] George Mason Law Review 1247.

—— 'Antitrust's "Curse of Bigness" Problem' [2020] Michigan Law Review 1259.

—— and Ma J, 'Understanding Online Markets and Antitrust Analysis' [2017] Northwestern Journal of Technology & Intellectual Property 43.

Spulber DF, 'The Economics of Markets And Platforms' [2019] Journal of Economics &

Management Strategy 159.

Stangl B, Inversini A and Schegg R, 'Hotels' Dependency on Online Intermediaries and Their Chosen Distribution Channel Portfolios: Three Country Insights' [2016] International Journal of Hospitality Management 87.

Steinbaum M, 'Antitrust, the Gig Economy, and Labor Market Power' [2019] Law and Contemporary Problems 45.

—— and Stucke ME, 'The Effective Competition Standard: A New Standard for Antitrust' [2019] University of Chicago Law Review 595.

Steiner RL, 'Intrabrand Competition – Stepchild of Antitrust' [1991] Antitrust Bulletin 155.

—— 'The Inverse Association Between the Margins of Manufacturers and Retailers' [1993] Review of Industrial Organization 717.

—— 'Vertical Competition, Horizontal Competition, and Market Power' [2008] Antitrust Bulletin 251.

Stephany F, Dunn M, Sawyer S and Lehdonvirta V, 'Distancing Bonus or Downscaling Loss? The Changing Livelihood of Us Online Workers in Times of COVID-19' [2020] Tijdschrift voor Economische en Sociale Geografie 561.

Stewart H, 'A Formal Approach to Contractual Duress' [1997] University of Toronto Law Journal 175.

Streit ME, 'Economic Order, Private Law and Public Policy. The Freiburg School of Law and Economic in Perspective' [1992] Journal of Institutional and Theoretical Economics 675.

Stucke ME, 'Behavioral Economists at the Gate: Antitrust in the Twenty-First Century' [2007] Loyola University Chicago Law Journal 513.

—— 'Is Competition Always Good?' [2013a] Journal of Antitrust Enforcement 162.

—— 'Should Competition Policy Promote Happiness' [2013b] Fordham Law Review 2576.

—— and Grunes AP, 'Why More Antitrust Immunity for the Media is a Bad Idea' [2011] Northwestern University Law Review 1399.

—— and Ezrachi A, 'When Competition Fails to Optimize Quality: A Look at Search Engines' [2017] Yale Journal of Law & Technology 70.

Sullivan KM, 'Unconstitutional Conditions' [1989] Harvard Law Review 1413.

Sullivan LA, 'Book Review: Trade Regulation, Cases and Materials' [1974] Columbia Law Review 1214.

—— 'Economics and More Humanistic Disciplines: What Are the Sources of Wisdom for Antitrust?' [1977] University of Pennsylvania Law Review 1214.

—— 'Monopolization: Corporate Strategy, the IBM Cases, and the Transformation of the Law' [1982] Texas Law Review 582.

Tarantino, 'A Simple Model of Vertical Search Engines Foreclosure' [2013] Telecommunications Policy 1.

Taylor RS, 'Market Freedom as Antipower' [2013] American Political Science Review 593.

Teachout Z and Khan L, 'Market Structure and Political Law: A Taxonomy of Power' [2014] Duke Journal of Constitutional Law & Public Policy 37.

Terry A 'Unfair Competition and the Misappropriation of a Competitor's Trade Values' [1988] Modern Law Review 296.

Torfing J, 'Rethinking Path Dependence in Public Policy Research' [2009] Critical Policy Studies 70.

Tragone AJ, 'Defining the Press Clause: The End of Hot News and the Attempt to Save Traditional Media' [2016] Chicago-Kent Journal of Intellectual 237.

Ursu RM, 'The Power of Rankings: Quantifying the Effect of Rankings on Online Consumer Search and Purchase Decisions' [2018] Marketing Science 530.

Vacklavik MC and Pithan LH, 'The Agency Search: The Meaning of Work for App Drivers [2018] Revista de Administração Mackenzie 0 <https://bit.ly/3kkKDk0> or <https://bit.ly/3jgOoWI> accessed 29 September 2020.

Vaheesan S, 'Accommodating Capital and Policing Labor: Antitrust in the Two Gilded Ages' [2019] Maryland Law Review 766.

Valdivia, 'The Scope of the 'Special Responsibility' Upon Vertically Integrated Dominant Firms After the Google Shopping Case: Is There a Duty to Treat Rivals Equally and Refrain from Favouring Own Related Business?' [2019] World Competition Law and Economics Review 43.

van der Woude M, 'Judicial Control in Complex Economic Matters' [2019] Journal of European Competition Law & Practice 415.

van Dijck J, Nieborg D and Poell T, 'Reframing Platform Power' [2019] Internet Policy Review 0 <https://bit.ly/30vWVhM> accessed 29 September 2020.

Van Doorn N, 'Platform Labor: On the Gendered and Racialized Exploitation of Low-Income Service Work in the "On-Demand" Economy' [2017] Information, Communication & Society 898.

Van Loo R, 'The Corporation as Courthouse' [2016] Yale Journal on Regulation 547.

—— 'Rise of the Digital Regulator' [2017] Duke Law Journal 1267.

VanderWeele TJ, 'On the Promotion of Human Flourishing' [2017] Proceedings of the National Academic of Sciences of the United States of America 8148.

Varian HR, 'Seven Deadly Sins of Tech?' [2021] Information Economics & Policy (forthcoming).

Veen A, Barratt T and Goods C, 'Platform-Capital's "App-etite" for Control: A Labour Process Analysis for Food-Delivery Work in Australia' [2019] Work, Employment and Society 388.

Veljanovski CG, 'Wealth Maximization, Law and Ethics – On the Limits of Economic Efficiency [1981] International Review of Law and Economics 5.

Verdier M, 'Les Développements Récents de la Littérature sur les Plates-formes [2016] Revue Économique 25.

Vermeulen E, Fenwick M and Kaal W, 'Why Blockchain Will Disrupt Corporate Organizations: What Can Be Learned from the "Digital Transformation"' [2018] The Journal of the British Blockchain Association 91.

Vogel L, ‘Competition Law and Buying Power: The Case for A New Approach in Europe’ [1998] ECLR 4.

Wadlow C, ‘A Riddle Whose Answer is “Tort”: A Reassessment of International News Service v Associated Press’ [2013] Modern Law Review 649.

Wang Q, Li B and Singh PV, ‘Copycats vs. Original Mobile Apps: A Machine Learning Copycat-Detection Method and Empirical Analysis’ [2018] Information Systems Research 273.

Weber Waller S, ‘The Past, Present, and Future of Monopolization Remedies’ [2009] Antitrust Law Journal 11.

Weiler JHH, ‘In the Face of Crisis: Input Legitimacy Output Legitimacy and the Political Messianism of European Integration’ [2012] Journal of European Integration 825.

Weitz B and Wang Q, ‘Vertical Relationships in Distribution Channels: A Marketing Perspective’ [2004] Antitrust Bulletin 859.

Wen W and Zhu F, ‘Threat of Platform-Owner Entry and Complementor Responses: Evidence from the Mobile App Market’ [2019] Strategic Management Journal 1336.

Werden GJ, ‘Remedies for Exclusionary Conduct Should Protect and Preserve the Competitive Process’ [2009] Antitrust Law Journal 6.

—— ‘Antitrust’s Rule of Reason: Only Competition Matters’ [2014] Antitrust Law Journal 713.

Werron T, ‘Why do we Believe in Competition? A Historical-Sociological View of Competition as an Institutionalized Modern Imaginary’ [2015] Journal of Social Theory 186.

Whinston M, ‘Tying, Foreclosure and Exclusion’ [1990] American Economic Review 837.

White MD, ‘On the Justification of Antitrust: A Matter of Rights and Wrongs’ [2016] Antitrust Bulletin 323.

Wight JB, ‘The Ethics Behind Efficiency’ [2017] Journal of Economic Education 15.

Williamson OE, ‘Economies as an Antitrust Defense Revisited’ [1977] University of Pennsylvania Law Review 699.

Wilson CS and Klovers K, ‘The Growing Nostalgia for Past Regulatory Misadventures and the Risk of Repeating These Mistakes With Big Tech’ [2020] Journal of Antitrust Enforcement 10.

Wood AJ, Graham G, Ledhdonvirta V and Hjorth I, ‘Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy’ [2019] Work, Employment and Society 56.

Woodcock J and Johnson MR, ‘Gamification: What it is, and how to Fight It’ [2018] The Sociological Review 542.

Wright J, ‘One-sided Logic in Two-sided Markets’ [2004] Review of Network Economics 44.

Wright JD, ’Moving Beyond Naïve Foreclosure Analysis [2012] George Mason Law Review 1163.

—— and Yun JM, ‘Use and Abuse of Bargaining Models in Antitrust’ [2020] Kansas

Law Review 1055.

Zabriskie JF, 'Bots, Scrapers, and Other Unwanted Visitors to Your Web Site: Can You Keep Them Out?' [2009] The Computer & Internet Lawyer 5.

Zäch R and Künzler A, 'Efficiency or Freedom to Compete? Towards an Axiomatic Theory of Competition Law' [2009] Zeitschrift für Wettbewerbsrecht 269.

Zimmerman D, 'Coercive Wage Offers' [1981] Philosophy & Public Affairs 121.

Zingales L, 'Towards a Political Theory of the Firm' [2017] Journal of Economic Perspectives 113.

Zhu F and Liu Q, 'Competing with Complementors: An Empirical Look at Amazon.com' [2018] Strategic Management Journal 2618.

THESES

Callaci B, 'The Historical and Legal Creation of a Fissured Workplace: The Case of Franchising Case of Franchising' (PhD thesis, University of Massachusetts Amherst 2019).

Chung JH, 'Estimation of Sequential Search Models' (PhD thesis, University of Chicago Booth School of Business 2019).

Denny M, 'Star Wars Galaxies: Control and Resistance in Online Gaming' (MA thesis, Carleton University 2020).

Larrieu T, 'Topics in Industrial Organization applied to Competition Policy' (PhD thesis, University of Paris-Saclay 2019).

Qiu Y, 'Strategizing for E-Commerce: Science and Art in Communication and Pricing' (PhD thesis, University of Texas 2018).

WORKING PAPERS

Aguiar L and Waldfogel J, 'Platforms, Promotion, and Product Discovery: Evidence from Spotify Playlists' (June 2018) NBER Working Paper No 24713 <http://www.nber.org/papers/w24713> accessed 29 September 2020.

Athey S, Mobius M and Pal J, 'The Impact of Aggregators on Internet News Consumption' (January 2017) Working paper <https://stanford.io/2QVYyhj> accessed 29 September 2020.

BIAC, 'Are Competition and Democracy Symbiotic?' (2017) OECD DAF/COMP/GF/WD(2017)1 <https://bit.ly/2G1qkJm> accessed 29 September 2020.

Belleflamme P and Peitz M, 'Inside the Engine Room of Digital Platforms: Reviews, Ratings, and Recommendations' (February 2018b) CRC TR 224 Discussion Paper Series> http://dx.doi.org/10.2139/ssrn.3128141> accessed 29 September 2020.

Boik A, 'Prediction and Identification in Two-Sided Markets' (March 2018) Working Paper <https://ssrn.com/abstract=3104846> accessed 29 September 2020.

Bourreau M and de Streel A, 'Digital Conglomerates and EU Competition Policy' (March

2019) Working paper <https://ssrn.com/abstract=3350512> accessed 29 September 2020.

—— and Gaudin G, 'Streaming Platform and Strategic Recommendation Bias (31 December 2019) Working paper <https://ssrn.com/abstract=3290617> accessed 29 September 2020.

Castillo JC, Who Benefits from Surge Pricing? (28 December 2019) Working paper < https://bit.ly/3cNQpr5> accessed 29 September 2020.

Chen MK and Sheldon M, 'Dynamic Pricing in a Labor Market: Surge Pricing and Flexible Work on the Uber Platform (11 December 2015) Working paper <https://perma.cc/2L6G-EXZB> accessed 29 September 2020.

Cohen P, Hahn R, Hall J, Levitt S and Metcalfe R, 'Creative Destruction of the Sharing Economy in Action: The Case of Uber' (2016) NBER Working Paper No 22627 <https://www.nber.org/papers/w22627> accessed 29 September 2020.

Colomo PI, 'EU Competition Law in the Regulated Network Industries' (2016) LSE Law Society and Economy Working Papers 08/2016; in Jonathan Galloway (ed), *Intersections of Antitrust: Policy and Regulation* (Oxford University Press) forthcoming <https://ssrn.com/abstract=2747785> accessed 29 September 2020.

De los Santos B, O'Brien DP and Wildenbeest MR, 'Agency Pricing and Bargaining: Evidence from the E-Book Market' (January 2020) Working Paper <https://bit.ly/3eDwpYG> accessed 29 September 2020.

Duch-Brown N, 'The Vertical B2B Relationship Between Platforms and their Suppliers. A Literature Review' (2017) (unpublished article on file with the author).

Edelman B, 'Impact of OTA Bias and Consolidation on Consumers' (12 July 2017) <https://perma.cc/4K47-QFT2> accessed 29 September 2020.

Evans DS, 'Why the Dynamics of Competition for Online Platforms Leads to Sleepless Nights, But not Sleepy Monopolies' (25 July 2017) <https://ssrn.com/abstract=3009438> accessed 29 September 2020.

Ezrachi A, 'EU Competition Law Goals and the Digital Economy' (6 June 2018) Oxford Legal Studies Research Paper No 17/2018 <https://ssrn.com/abstract=3191766> accessed 29 September 2020.

Filippas A, Horton JJ and Golden JM, 'Reputation Inflation' (22 April 2020) Working Paper <https://bit.ly/2GaY9Wc> accessed 29 September 2020.

Foer AA, 'Abuse of Superior Bargaining Position (ABSP): What Can We Learn from Our Trading Partners' (29 September 2016) AAI Working Paper No 16-02 <https://bit.ly/3902JCG> accessed 29 September 2020.

Gaudin G and White A, 'On the Antitrust Economics of the Electronic Books Industry' (2014) Working Paper <https://ssrn.com/abstract=2352495> accessed 29 September 2020.

—— and White A, 'Vertical Agreements and User Access' (2018) Working Paper <https://ssrn.com/abstract=3290295> accessed 29 September 2020.

Hovenkamp H, 'Competition Policy for Labour Markets' (2019) Note for the OECD Roundtable on Competition Issues in Labour Markets 5-7 June 2019 <http://bit.ly/2IpDmOi> accessed 29 September 2020.

Jakhu G, 'Bundling in Platform Markets in the Presence of Data Advantage' (18 September 2018) Working Paper <https://bit.ly/2z84GyX> accessed 29 September 2020.

Jullien B and Sand-Zantman W, 'The Economics of Platforms: A Theory Guide for Competition Policy' [2020] Information Economics and Policy (forthcoming).

Kamepalli SK, Rajan RG and Zingales L, 'Kill Zone' (27 April 2020) Becker Friedman Institute for Economics Working Paper no 2020-19 <https://ssrn.com/abstract=3555915> accessed 29 September 2020.

Köhler E and Kolev S, 'The Conjoint Quest for a Liberal Positive Program: "Old Chicago", Freiburg and Hayek' (2011) Hamburg Institute of International Economics Research Paper 109 <https://ssrn.com/abstract=2888716> accessed 29 September 2020.

Lam CT and Liu M, 'Demand and Consumer Surplus in the On-demand Economy: The Case of Ride Sharing' (11 October 2017) Working Paper <https://bit.ly/2BWT5lX> accessed 29 September 2020.

—— 'The Geography of Ridesharing: A Case Study of New York City' (18 May 2020) Working Paper < https://ssrn.com/abstract=2997190> accessed 29 September 2020.

Liu M, Brynjolfsson E and Dowlatabadi J, 'Do Digital Platforms Reduce Moral Hazard? The Case of Uber and Taxis' (19 May 2020) <https://ssrn.com/abstract=3239763> accessed 29 September 2020.

Lyons B, 'Could Politicians Be More Right Than Economists? A Theory of Merger Standards' (2003) EUI Working Papers <https://goo.gl/fr4vWF> accessed 29 September 2020.

Mantovani, A, Piga CA and Reggiani C, 'Online Platform Price Parity Clauses: Evidence from the EU Booking.com case (28 August 2020) Working Paper <https://ssrn.com/abstract=3381299> accessed 6 August 2020.

Marty F, 'Pouvoirs Économiques Privés et Ordre Concurrentiel. Une Application à l'Économie Numérique' (2018) Sciences PO OFCE Working Paper n° 16 <https://bit.ly/2HRzLL6> accessed 29 September 2020.

Mungan MC and Wright JD, 'Optimal Standards of Proof in Antitrust' (30 July 2019) George Mason University Law & Economics Research Paper Series 19-20 <https://ssrn.com/abstract=3428771> accessed 29 September 2020.

Newlands G, Lutz C and Fieseler C, 'Power in the Sharing Economy' (2017) EU H2020 Research Project Ps2Share: Participation, Privacy, and Power in the Sharing Economy <https://ssrn.com/abstract=2960938> accessed 29 September 2020.

—— 'European Perspective on Power in the Sharing Economy' (2018) Report from the EU H2020 Research Project Ps2Share: Participation, Privacy, and Power in the Sharing Economy <https://ssrn.com/abstract=3046473> accessed 29 September 2020.

Prüfer J and Schottmuller C, 'Competing with Big Data' (16 February 2017) TILEC Discussion Paper No. 2017-006; CentER Discussion Paper 2017-007 <https://ssrn.com/abstract=2918726> accessed 29 September 2020.

Ritter C, 'Remedies for Breaches of EU Antitrust Law' (17 May 2016)

<https://ssrn.com/abstract=2781441> accessed 29 September 2020.

—— 'The Interface Between Competition and Regulation in EU Law' (27 June 2019) Oxford CCLP Antitrust Enforcement Symposium 2019 (unpublished article on file with author).

Rivares AB, Gal P, Millot V and Sorbe S, 'Like it or Not? The Impact of Online Platforms on the Productivity of Incumbent Service Providers' (21 May 2019) OECD Economics Department Working Papers No 1548 <https://bit.ly/36itfYG> accessed 29 September 2020.

Schweitzer H, Fetzer T and Peitz P, 'Digitale Plattformen : Bausteine für einen künftigen Ordnungsrahmen' (29 May 2016) ZEW Discussion Paper No 16-042 <https://bit.ly/2WrlmKH> accessed 29 September 2020.

Scott Morton FM and Dinielli DC, 'Roadmap for a Digital Advertising Monopolization Case Against Google' (May 2020a) <https://bit.ly/30NR347> accessed 29 September 2020.

—— 'Roadmap for an Antitrust Case Against Facebook' (June 2020b) <https://bit.ly/3dX5lTB> accessed 29 September 2020.

Schwellnus C, Geva A, Pak M and Veiel R, 'Gig Economy Platforms: Boon or Bane?' (21 May 2019) OECD Economics Department Working Papers No 1550 <https://bit.ly/2BtNh5n> accessed 29 September 2020.

Steiner RL, 'How Interactions Between Vertical and Horizontal Competition Determine Welfare Outcomes in Consumer Goods Industries' (2011) Oxford Centre for Competition Law and Policy Working Paper CCLP (L) 31 <https://bit.ly/2za5vXC> accessed 29 September 2020.

Stutz RM, 'The Evolving Antitrust Treatment of Labor-Market Restraints: From Theory to Practice' (31 July 2018) American Antitrust Institute <https://ssrn.com/abstract=3332642> accessed 29 September 2020.

Tirole J, 'Competition and the Industrial Challenge for the Digital Age' (3 April 2020) Working Paper <https://perma.cc/Y6VK-ZCZA> accessed 6 August 2020.

Trannoy A, 'Equality of Opportunity: A Progress Report' (August 2016) ECINEQ Working Paper 2016-408 <https://bit.ly/38bHTjd> accessed 29 September 2020.

Vanberg VJ, 'The Freiburg School: Walter Eucken and Ordoliberalism' (2004) Freiburg discussion papers on constitutional economics No. 04/11 <https://bit.ly/2L6Hfv8> accessed 29 September 2020.

Wu T, 'Tech Dominance and the Policeman at the Elbow' (26 February 2019) Columbia Public Law Research Paper No 14-623 <https://ssrn.com/abstract=3342598> accessed 29 September 2020.

NEWSPAPER ARTICLES

Bond S, 'Uber and Lyft to Offer Shares to Drivers as Part of Ipos' *Financial Times* (28 February 2019) <https://on.ft.com/2H5AaYu> accessed 29 September 2020.

—— and Mance H, 'Book Wars: Amazon's Page Turner' *Financial Times* (15 August 2014) <https://on.ft.com/2xMEjhS> accessed 29 September 2020.

Bowles N, 'For Cities Wooing Amazon's New Headquarters, Nothing is too Strange' *The New York Times* (25 September 2017) <https://nyti.ms/2xDgKFD> accessed 29 September 2020.

Bradshaw T, 'Deliveroo in Limbo as Rivals and Regulators Close in' *Financial Times* (22 January 2020) <https://on.ft.com/2YuFwnt> accessed 29 September 2020.

Braithwaite T, 'Is Yelp a Business or a Howl of Pain?' *Financial Times* (15 February 2019) <https://on.ft.com/2D4U6uB> accessed 29 September 2020.

Carr D, 'Giving Viewers What They Want' *The New York Times* (25 February 2013) <https://nyti.ms/3fdbkVd> accessed 29 September 2020.

Cookson R, 'Spotify Bans "Payola" on Playlists' *Financial Times* (20 August 2015) <https://on.ft.com/2KTk1qG> accessed 29 September 2020.

Crofts L, 'Pursuit of "Fairness" Alone Can't Underpin Antitrust Probes, UK's Marsden Says' *mlex market insight* (25 October 2017).

De Beaupuy F, 'France to Build Online Platform to Rival Airbnb, Booking.com' *Bloomberg* (14 May 2020) <https://bloom.bg/3eTmgqD> accessed 29 September 2020.

Dredge S, 'Should Apple Take More Action Against March of the iOS Clones?' *The Guardian* (3 February 2012) <https://bit.ly/2FtFUNd> accessed 29 September 2020).

Dwoskin E, 'Facebook's Imitation Not Quite Flattery' *The Washington Post* (11 August 2017) <https://bit.ly/2zrpl1d> accessed 29 September 2020.

—— 'Tech Giants are Profiting — and Getting more Powerful — Even as the Global Economy Tanks' (29 April 2020) *The Washington Post* <https://wapo.st/2DA8pYt> accessed 29 September 2020.

Emont J, Stevens L and McMillan R, 'Amazon Investigates Employees Leaking Data for Bribes' *The Wall Street Journal* (16 September 2018) <https://on.wsj.com/2MBY511> accessed 29 September 2020.

Fleming S, Brunsden J, Giles C and Mallet V, 'Europeans Vow to Pursue Digital Tax Plans After US 'Provocation' *Financial Times* (18 June 2020) <https://on.ft.com/3eXa6gn> accessed 29 September 2020.

Greene J, 'Aggressive Amazon Tactic Pushes You to Consider Its Own Brand Before You Click "Buy"' *The Washington Post* (28 August 2019) <https://wapo.st/349hj85> 29 September 2020.

—— 'Amazon Shoppers Complaining at Record Levels' *The Washington Post* (22 May 2020) <https://wapo.st/2VNLBdZ> accessed 29 September 2020.

Greenwood M, 'Majority Supports Antitrust Review of Tech Giants: Poll' *The Hill* (8 May 2019) <https://bit.ly/2Z5RkN0> accessed 29 September 2020.

Hale T, 'Tech Companies Become the State, Phase One' *Financial Times* (5 November 2019) <https://on.ft.com/2VFOsFd> accessed 29 September 2020.

Harwell D, 'Is Your Pregnancy App Sharing Your Intimate Data With Your Boss?' *The Washington Post* (10 April 2019) <https://wapo.st/2EZCD83> accessed 29 September 2020.

Horwitz J, 'Facebook Pledges $130 Million to Fund "Supreme Court" for Content' *The*

Wall Street Journal (12 December 2019) <https://on.wsj.com/2GD8snY> 29 September 2020.

Indap S, 'Revisiting the Principle of "Shareholder Primacy"' *Financial Times* (24 September 2018) <https://on.ft.com/2XfTREn> accessed 29 September 2020.

Iqbal N, 'Forget The DJs: Spotify Playlists are the New Musical Starmakers' *The Guardian* (28 April 2019) <http://bit.ly/2PfBu0E> accessed 29 September 2020.

Keegan V, 'Will MySpace Ever Lose Its Monopoly?' *The Guardian* (8 February 2007) <https://bit.ly/3gFr9Vs> accessed 29 September 2020.

Kim E, 'Amazon Wants to Invest in Start-Ups, but Some are Nervous About Taking the Money' *CNBC* (13 September 2017) <https://cnb.cx/2VZsKNW> accessed 29 September 2020.

Koeze E and Popper N, 'The Virus Changed the Way We Internet' *The New York Times* (7 April 2020) <https://nyti.ms/3eBuVNK> accessed 29 September 2020.

Krugman P, 'Amazon's Monopsony Is Not OK' *The New York Times* (19 October 2014) <https://nyti.ms/2Cs48pR> accessed 29 September 2020.

Larger T, 'Italy Competition Watchdog Opens Probe Into Amazon, Adding to EU List' *Politico* (16 April 2019) <https://politi.co/2kpzCnt> accessed 29 September 2020.

Laurent O, 'Why we Do it: Photographers and Photo Editors on the Passion That Drives Their Work' (30 June 2017) *Time Magazine* <https://perma.cc/86N2-Z8YC> accessed 29 September 2020.

Lee D, 'Uber Announces Further 3,000 Job Cuts' *Financial Times* (18 May 2020) <https://on.ft.com/3ftGkQn> accessed 29 September 2020.

Lynch D J, 'Big Tech and Amazon: Too Powerful to Break Up?' *Financial Times* (30 October 2017) <https://on.ft.com/39EU5sP> accessed 29 September 2020.

Mattioli D, 'Amazon Changed Search Algorithm in Ways That Boost Its Own Products' *The Wall Street Journal* (16 September 2019) <https://on.wsj.com/2J8QyYq> accessed 29 September 2020.

—— 'Amazon Scooped Up Data From Its Own Sellers to Launch Competing Products' (23 April 2020) *The Wall Street Journal* <https://on.wsj.com/2Wn8LaI> accessed 29 September 2020.

McMillan R, 'Lyrics Site Accuses Google of Lifting Its Content' *The Wall Street Journal* (16 June 2019) <https://on.wsj.com/35Of23q> accessed 29 September 2020.

Morrison I, 'Bye, Spotify: Can This New Streaming Service Help Listeners Play Fair?' *The Guardian* (25 May 2018) <https://bit.ly/2YRWltJ> accessed 29 September 2020.

Mundy S, 'India's Ecommerce Crackdown Upends Big Foreign Players' *Financial Times* (14 January 2019) <https://on.ft.com/2Hi6pFK> accessed 29 September 2020.

Nicas J and Collins K, 'How Apple's Apps Topped Rivals in the App Store It Controls' *The New York Times* (9 September 2019) <https://nyti.ms/2lJ6O9W> accessed 29 September 2020.

—— Wakabayashi D, 'Sonos, Squeezed by the Tech Giants, Sues Google' *The New York Times* (7 January 2020) <https://nyti.ms/3atQFJC> accessed 29 September 2020.

Nilson P, 'Google to Invest Millions in UK News Group' *Financial Times* (19 September

2019) <https://on.ft.com/2PEdGkJ> accessed 29 September 2020.

Oliver C, 'FT Explainer: What is Getty's Complaint Against Google?' *Financial Times* (27 April 2016) <https://on.ft.com/2Sho4Cr> accessed 29 September 2020.

Ovide S, 'Sorry, eBay and Uber. You're Hated. Why the Middlemen are the Internet's Villains.' *The New York Times* (24 June 2020) <https://nyti.ms/2Bu8hZJ> accessed 29 September 2020.

Preetika R, 'Uber Tests Feature Allowing Some California Drivers to Set Fares' *The Wall Street Journal* (21 January 2020) <https://on.wsj.com/3a9LCxT> accessed 29 September 2020.

Romm T and Greene J, 'House Lawmakers Demand Amazon CEO Jeff Bezos Testify in Antitrust Probe, Threatening Potential Subpoena' *The Washington Post* (1 May 2020) <https://wapo.st/2Wnc2a0> accessed 29 September 2020.

Rose C, 'Amazon's Jeff Bezos Looks to the Future' *CBS News* (1 December 2013) <https://cbsn.ws/2WkjF1X> accessed 29 September 2020.

Rutenberg J, 'News Outlets to Seek Bargaining Rights Against Google and Facebook' *New York Times* (9 July 2017) <https://nyti.ms/31l2Y80> accessed 29 September 2020.

Sainato M, '"They Treat Us Like Crap": Uber Drivers Feel Poor and Powerless on Eve of IPO' *The Guardian* (7 May 2019) <https://bit.ly/3f52ibU> accessed 29 September 2020.

Salkowski J, 'AOL May Also Have Monopoly' *Chicago Tribune* (19 June 2000) <https://bit.ly/2ZZdKl8> accessed 29 September 2020.

Sanger DE, 'Tech Firms Sign 'Digital Geneva Accord' Not to Aid Governments in Cyberwar' *The New York Times* (17 April 2018) <https://nyti.ms/2ETvMqU> accessed 29 September 2020.

Schechner S, 'You Give Apps Sensitive Personal Information. Then They Tell Facebook' *The Wall Street Journal* (22 February 2019) <https://on.wsj.com/2WRhlyL> accessed 29 September 2020.

Scheiber N, 'How Uber Uses Psychological Tricks to Push Its Drivers' Buttons' *The New York Times* (4 April 2017) <https://nyti.ms/2VWm3xi> accessed 29 September 2020.

—— Schwartz ND and Hsu T, '"White-Collar Quarantine" Over Virus Spotlights Class Divide' *The New York Times* (27 March 2020) <https://nyti.ms/2XlHIOO> accessed 29 September 2020.

Schrager A, 'A Nobel-Winning Economist's Guide to Taming Tech Monopolies' *Quartz* (27 June 2018) <https://bit.ly/2UBvuyT> accessed 29 September 2020.

Shubber K, 'US Antitrust Chief Signals Comfort with Tech Deals' *Financial Times* (12 July 2018) <https://on.ft.com/2JhF8Pr> accessed 29 September 2020.

Sisario B, 'While Some Cry 'Fake,' Spotify Sees No Need to Apologize' *The New York Times* (14 July 2017) <https://nyti.ms/3faAy6D> accessed 29 September 2020.

Smyth J, 'Australia Piles Pressure on Google and Facebook to Pay for News' *Financial Times* (31 July 2020) <https://on.ft.com/2XioTvu> accessed 29 September 2020.

Stacey K, Shubber K and Murphy H, 'Which Antitrust Investigations Should Big Tech Worry About?' *Financial Times* (28 October 2019) <https://on.ft.com/3fxwwF8>

accessed 29 September 2020.

Streitfeld D, 'Writers Feel an Amazon-Hachette Spat' *The New York Times* (9 May 2014) <https://nyti.ms/35bNo24> accessed 29 September 2020.

The Economist, 'How to Tame the Tech Titans' *The Economist* (18 January 2018) <https://econ.st/2BnIK4c> accessed 29 September 2020.

Thiel P, 'Competition is for Losers' *The Wall Street Journal* (12 September 2014) <https://on.wsj.com/2JRRGQm> accessed 29 September 2020.

Timberg C, 'How Conservatives Learned to Wield Power Inside Facebook' *The Washington Post* (20 February 2020) <https://perma.cc/GSX9-7WMS> accessed 29 September 2020.

Toplensky R and Nicolaou A, 'Spotify Files EU Antitrust Complaint Against Apple' *Financial Times* (13 March 2019) <https://on.ft.com/2ktVJJF> accessed 29 September 2020.

Trachtenberg J A, 'Authors Guild Met With DoJ to Seek Investigation Into Amazon's Practices' *The Wall Street Journal* (1 October 2014) <https://on.wsj.com/2yzk87h> accessed 29 September 2020.

Tracy R, 'Tech Giants Draw Fire in Congress; Lawmakers Suggest Internet Companies Need More Oversight to Ensure Competition' *The Wall Street Journal* (16 July 2019) <https://on.wsj.com/2WhzyFg> accessed 29 September 2020.

Vigna P, 'Tech Giants Have Hijacked the Web. It's Time for a Reboot' *The Wall Street Journal* (26 October 2019) <https://on.wsj.com/36UIPIl> accessed 29 September 2020.

Wakabayashi D, Nicas J, Lohr S and Isaac M, 'Big Tech Could Emerge From Coronavirus Crisis Stronger Than Ever' *The New York Times* (23 March 2020) <https://nyti.ms/2TV93F4> accessed 29 September 2020.

Wigglesworth R, 'How Big Tech Got Even Bigger in the Covid-19 Era' *Financial Times* (1 May 2020) <https://on.ft.com/3hvX76T> accessed 29 September 2020.

Van Dorpe S, 'EC Official Flags Theory of Harm to Innovation Through Scraping' *PaRR* (8 September 2017) <https://perma.cc/T6EB-UFJB> accessed 29 September 2020.

SPECIALIZED BLOGS AND MAGAZINES

Abril D, 'Uber's Proposed Grubhub Acquisition Highlights a Growing Food Fight Over Deliveries' (*Fortune*, 17 May 2020) <https://bit.ly/36KRQDy> accessed 29 September 2020.

Anchustegui IH and Nowag J, 'Buyer Power in The Big Data and Algorithm Driven World: The Uber & Lyft Example' (*Antitrust Chronicle*, September 2017) 31 <https://bit.ly/3kVByha> accessed 29 September 2020.

Beilinson J, 'Glow Pregnancy App Exposed Women to Privacy Threats, Consumer Reports Finds' (*Consumer Reports*, 28 July 2016) <https://bit.ly/3cv47OK> accessed 29 September 2020.

Colomo PI, 'Against The Footballisation of Competition Policy: How to Advance the General Interest and Avoid Polarisation' (*Chillin'Competition*, 18 September 2019)

<https://bit.ly/33RSIH8> accessed 29 September 2020.

Curien N, 'Innovation and Regulation Serving the Digital Revolution (*The Journal of Regulation & Compliance,* 2011) <https://bit.ly/2UxFCsf> or <https://bit.ly/2WI5dRt> accessed 29 September 2020.

Dealessandri M, 'What is the Best Game Engine: Is Gamemaker Right for You?' (*gameindustry.biz,* 16 January 2020) <https://bit.ly/3fSz0yz> accessed 29 September 2020.

Denissen N, 'Survey Says: Small Businesses Find Success with Amazon' (*The Amazon blog*, 16 January 2020) <https://bit.ly/2B5De66> accessed 29 September 2020.

Dorsey E, Rybnicek JM and Wright JD, 'Hispter Antitrust Meets Public Choice Economics: The Consumer Welfare Standard, Rule of Law, and Rent Seeking' (*CPI Antitrust Chronicle,* April 2018) 21 <https://bit.ly/3kmyc7c> accessed 29 September 2020.

Edelman G, 'The Big Tech Hearing Proved Congress Isn't Messing Around' (*Wired*, 29 July 2020) <https://bit.ly/3id6LuT> accessed 29 September 2020.

Ek D, 'Consumers and Innovators Win on a Level Playing Field' (*Spotify*, 13 March 2019) <https://bit.ly/2F9MDcy> accessed 29 September 2020.

Elmas M, 'The Dark Side of Online Travel Booking: Fed Up Small Businesses Call for ACCC Action' (*SmartCompany,* 11 September 2018) <https://bit.ly/3c0mWct> accessed 29 September 2020.

Evans DS and Schmalensee R, 'Ignoring Two-Sided Business Reality Can Also Hurt Plaintiffs' (*CPI Antitrust Chronicle,* April 2018) 47 <https://bit.ly/3kmyc7c> accessed 29 September 2020.

Farber D, 'What Steve Jobs Really Meant When He Said "Good Artists Copy; Great Artists Steal"' (*CNET,* 28 January 2014) <https://cnet.co/3fGW3w5> accessed 29 September 2020.

Finley K, '"Scraper" Bots and the Secret Internet Arms Race' (*Wired,* 23 July 2018) <https://perma.cc/X8R5-TXLQ> accessed 29 September 2020.

Frade E and Marques de Carvalho V, 'New Approaches to Cartel Enforcement and Spillover Effects in Brazil: Exchange of Information, Hub and Spoke Agreements, Algorithms, and Anti-Poaching Agreements' (*Competition Policy International*, 26 November 2019) <https://perma.cc/6DNW-HKBC> accessed 29 September 2020.

Frison-Roche M-A, 'Faute de Régulation Efficace, l'Autorité Française de la Concurrence se Substitue à un Régulateur pour Contrôler Google : L'exemple d'Adwords' (*Journal of Regulation & Compliance,* 2015) <http://bit.ly/3cRYQB9> 29 September 2020.

Gans J, '"Information Wants to be Free": The History of That Quote' (25 October 2015) *Digitopoly* <https://perma.cc/DB5K-HNYY> accessed 23 May 2020.

Guadamuz A, 'Avatars Behaving Badly' (*TechnoLlama,* 3 June 2009) <https://perma.cc/RS7W-G2L5> accessed 29 September 2020.

Hayhurst L, 'Coronavirus: Expedia and Booking Among the Big Losers as Billions Wiped Off Valuations' (*Travolution,* 27 March 2020) <https://bit.ly/3hwFeF2> accessed 29 September 2020.

Kanter J and Kressin B, 'Online Platforms and the Commoditization of News Content' (*CPI Antitrust Chronicle*, December 2017) <https://bit.ly/36hEoc3> accessed 29 September 2020.

Kelly K, 'A Brief History of American Payola' (*Vice*,14 February 2016) <https://bit.ly/35Itl9R> accessed 29 September 2020.

Kumar VD, 'How Does Amazon Put a Customer on the "Path of Least Resistance"? (*Hackernoon*, 20 November 2018) <https://bit.ly/2VDZqgd> accessed 29 April 2019.

Lamadrid de Pablo A, 'Preliminary Thoughts on Google's Proposed Commitments' (*Chillin'Competition*, 13 June 2013) <https://bit.ly/3gOGPpe> accessed 29 September 2020.

Marino-Nachison D, 'Spotify Stock is Rising After an Analyst Said it can be 'Dominant' (*Barron's*, 23 July 2019) <http://bit.ly/2HCZWDd> accessed 29 September 2020.

Marty F and Pillot J, 'With Uncertain Damage Theory Come Unpredictable Effects of Remedies: "Libres Propos" on The Android Case' (*CPI Antitrust Chronicle*, December 2018) 38 <https://bit.ly/2Xw2N8I> accessed 29 September 2020.

Maschewski F and Nosthoff A-V, 'Res Publica ex Machina : On Neocybernetic Governance and the End of Politics' (*Institute of Network Cultures*, 18 October 2018) <https://bit.ly/2VtsqDb> accessed 29 September 2020.

Masters K, '89% of Consumers Are More Likely to Buy Products from Amazon than other E-Commerce Sites: Study' (*Forbes*, 20 March 2019) <https://bit.ly/2Y057p7> accessed 29 September 2020.

Moorman C, 'Why Apple is Still a Great Marketer and What You Can Learn' (*Forbes*, 12 January 2018) <https://bit.ly/3cA1ivT> accessed 29 September 2020.

Neely A, 'Hands on with Cycle, Apple's New Menstrual Cycle Tracker in iOS 13' (*appleinsider*, 19 June 2019) <https://bit.ly/2xXWHEw> accessed 29 September 2020.

Panettieri J, 'Big Tech Antitrust Investigations: Amazon, Apple, Facebook and Google Updates' (*ChannelE2E*, 27 July 2020) <https://bit.ly/3cFO4hJ> accessed 29 September 2020).

Pasquale F, 'From Territorial to Functional Sovereignty: The Case of Amazon' (*Law and Political Economy*, 6 December 2017) <https://bit.ly/2rLaYRd> accessed 29 September 2020.

Phocuswright Research, 'Four Key Developemnts Keeping the U.S. OTA Market Exciting (*PhocusWire*, 4 February 2019) <https://bit.ly/308Mq4g> accessed 29 September 2020.

Pot J, 'What Does it Mean When Apple "Sherlocks" an App?' (*How-To Geek*, 14 March 2017) <https://bit.ly/3cr3fuy> accessed 29 September 2020.

Pratka RI, 'With a Focus on Artists, the Platform Cooperative Stocksy is Redefining Stock Photography' (*Shareable*, 10 October 2018) <https://bit.ly/2BpwQr1> accessed 29 September 2020.

Queensland University of Technology, 'Gig Economy may Hold Some Hope for Jobs in Age of COVID-19' (*Phys.org*, 26 May 2020) <https://bit.ly/2Y484ow> accessed

29 September 2020.

Quoteresearch, 'Your Margin is My Opportunity: Jeff Bezos? Adam Lashinsky? Om Malik? Apocryphal?' (*Quote Investigator*, 13 January 2019) <https://bit.ly/3k48hAz> accessed 29 September 2020.

Rahman KS, 'Curbing the New Corporate Power' (*Boston Review*, 4 May 2015) <https://perma.cc/VE4F-ZWRH> accessed 29 September 2020.

Remaly B, 'Vestager Hints at Amazon Concerns' (*Global Competition Review*, 28 September 2018) <https://bit.ly/2LMHbjA> accessed 29 September 2020.

Risch C, 'Too Big to Sue: Why Getty Images Isn't Pursuing a Copyright Case Against Google in the U.S.' (*Photo District News*, 17 May 2016) <https://perma.cc/D2LN-HQ8C> accessed 29 September 2020.

Robert JJ, 'Why Companies Like Porsche and Nestle are Turning to Worker-Owned Talent Site Braintrust for New Hires' (*Fortune*, 24 June 2020) <https://bit.ly/2NLFfHG> accessed 29 September 2020.

Rubin BF and Reichert C, 'Google, Facebook and Amazon Face Tough Questioning Over Potential Monopolies' (16 July 2019) *CNET* <https://cnet.co/2Wl12d7> accessed 29 September 2020.

Rustrum C, 'Q&A with Felix Weth of Fairmondo, the Platform Co-op that's Taking on eBay' (*Shareable*, 14 March 2016) <https://bit.ly/31Mg5RD> accessed 29 September 2020.

Shermer M, 'The Mind of the Market. Evolutionary Economics Explains Why Irrational Financial Choices Were Once Rational' (*Scientific American*, 2008) <https://bit.ly/2LvUNg0> accessed 29 September 2020.

Steinbaum M, 'The Feds Side Against Alt-Labor' (*Roosevelt Institute*, 16 November 2017) <https://bit.ly/3djVOWN> accessed 29 September 2020.

Sterling G, 'European Antitrust Chief Says Google's Auction-Based Shopping Remedy not Working' (*Search Engine Land*, 8 November 2019) <http://bit.ly/38AQRVZ> accessed 29 September 2020.

Stross RE, 'How Yahoo! Won the Search Wars' (*Fortune*, 2 March 1998) <https://bit.ly/2zKUXzB> accessed 29 September 2020.

Stucke ME and Ezrachi A, 'Looking up in the data-driven economy' (*CPI Antitrust Chronicle*, May 2017) 16 <https://perma.cc/BSN3-NH6H> accessed 29 September 2020.

Sullivan D, 'Wall Street Journal's Google Traffic Drops 44% After Pulling Out of First Click Free' (*Search Engine Land*, 5 June 2017) <https://bit.ly/2xU1VkU> accessed 29 September 2020.

Swartz J, 'Facebook is Experiencing Record Usage, but Will Advertisers Spend During Spread of Coronavirus?' (*MarketWatch*, 1 May 2020) <https://on.mktw.net/2Xkuzp0> accessed 29 September 2020.

Syme P, 'How Does a Decimated Activities Sector Find a Route to Recovery, Part 1' (*PhocusWire*, 23 April 2020) <https://bit.ly/2B5Xh4v> accessed 29 September 2020.

Thompson B, 'Ends, Means, and Antitrust' (*Stratechery*, 28 June 2017)

<https://perma.cc/D6P4-G9WN> accessed 29 September 2020.

Uber, 'We're Committed to our Driver-Partners' (*Uber Blog*, 3 November 2017) <https://ubr.to/3fwbuGR> accessed 29 September 2020.

Vergé T, 'Are Price Parity Clauses Necessarily Anticompetitive?' (*CPI Antitrust Chronicle*, January 2018) 49 <https://bit.ly/31oCYsh> accessed 29 September 2020.

Weiner ML, 'Antitrust is Cool Again' (*New York Law Journal*, 22 January 2018) <https://bit.ly/2qrLtAP> accessed 29 September 2020.

Welch C, 'Apple HealthKit Announced: A Hub for All Your iOS Fitness Tracking Needs' (*The Verge*, 2 June 2014) <https://bit.ly/3bUYF6r> accessed 29 September 2020.

Wood AJ, 'The UK Government's consultation on employment classification and control: a response' (*The Digital Inequality Group*, 15 May 2018) <https://bit.ly/2W3qKEJ> accessed 29 September 2020).

OTHER DOCUMENTS

Competition authority press releases, statements and memoranda

BWB, 'Austrian Federal Competition Authority Initiates Investigation Proceedings Against Amazon' (14 February 2019) <https://bit.ly/2Ebo5iV> accessed 29 September 2020.

CADE, Press release, 'CADE Publishes Guidelines on Horizontal Mergers' (1 August 2016) <http://bit.ly/38oNMbv> accessed 29 September 2020.

CMA, Press release, 'Hotel Booking Sites to Make Major Changes After CMA Probe' (6 February 2019) <http://bit.ly/31xnznw> accessed 29 September 2020.

EC, Memorandum, 'Commission Seeks Feedback on Commitments Offered by Google to Address Competition Concerns – Questions And Answers' (25 April 2013) MEMO/13/383 <https://bit.ly/33q1dZR> accessed 29 September 2020.

—— Press release, 'Commission Decides Not To Oppose The Production By Tabacalera Of Its Own Cigarette Filters' (8 May 1989) IP/89/330 <https://bit.ly/3a1qMSm> accessed 29 September 2020.

—— Press release, 'Antitrust: Commission Fines Google €2.42 Billion for Abusing Dominance as Search Engine by Giving Illegal Advantage to Own Comparison Shopping Service' (27 June 2017) IP/17/1784 <https://bit.ly/2shvEeB> accessed 29 September 2020.

—— Press release, 'Antitrust: Commission Opens Investigation Into Possible Anti-Competitive Conduct of Amazon' (17 July 2019) IP/19/4291 <https://bit.ly/2JC4JWU> accessed 29 September 2020.

—— Press release, 'Antitrust: Commission Consults Stakeholders On a Possible New Competition Tool' (2 June 2020) IP/20/977 <https://bit.ly/3dE8urm> accessed 4 August 2020.

FTC, 'Statement of the Federal Trade Commission Regarding Google's Search Practices

In the Matter of Google Inc. FTC File Number 111-0163 (3 January 2013a) <http://bit.ly/34eSpnr> accessed 29 September 2020.

—— 'Concurring and Dissenting Statement of Commissioner J. Thomas Rosch Regarding Google's Search Practices *In the Matter of Google Inc*., FTC File no 111-0163' (3 January 2013b) <http://goo.gl/J03dtZ> 29 September 2020.

—— 'Separate Statement of Commissioner Maureen Ohlhausen *In the Matter of Google Inc*.' (3 January 2013c) <https://bit.ly/2SFklOI> accessed 29 September 2020.

FTC Bureau of Competition, 'Internal Memorandum re Google Inc. File No 111-0163' (8 August 2012) <http://bit.ly/32wUGsS> accessed 29 September 2020.

Competition authority policy documents and reports

ACCC, 'Digital Platforms Inquiry. Final Report' (June 2019a) <http://bit.ly/32BZ5uF> accessed 6 August 2020.

—— 'Collective Bargaining Class Exemption Notice' (June 2019b) Draft for consultation <https://bit.ly/2WPxOoq> accessed 29 September 2020.

ACM, 'Market Study Into Mobile App Stores' (11 April 2019) <https://bit.ly/3a21xiz> accessed 29 September 2020.

AdC, 'Digital Ecosystems, Big Data and Algorithms' (July 2019) Issues Paper <https://bit.ly/3gAVq7u> accessed 29 September 2020.

ADLC, 'Avis no 18-A-03 du 6 mars 2018 portant sur l'exploitation des données dans le secteur de la publicité sur internet' (6 March 2018) <https://bit.ly/3kfYAQi> accessed 29 September 2020.

BKA, 'Summary of the Final Report of the Sector Inquiry into the food retail sector' (2014) <http://bit.ly/2VKlhT2> accessed 29 September 2020.

—— 'Guidance on Remedies in Merger Control' (May 2017) <http://bit.ly/2PX5ah2> accessed 29 September 2020.

CCI, 'Market Study on E-Commerce in India. Key Findings and Observations' (8 January 2020) <https://bit.ly/2XJpaI1> accessed 29 September 2020.

CMA, 'Digital Comparison Tools Market Study. Final Report' (2017) <https://bit.ly/3i8OAq6> accessed 29 September 2020.

—— 'Merger Remedies' (13 December 2018) <http://bit.ly/3cIVfWf> accessed 29 September 2020.

—— 'Letter to the Secretary of State for Business, Energy and Industry Strategy' (21 February 2019) available at <http://bit.ly/2GnsdfL> accessed 29 September 2020.

—— 'Regulation and Competition. A Review of the Evidence' (January 2020a) <https://bit.ly/32z9o5P> accessed 29 September 2020.

—— 'Online Platforms and Digital Advertising. Market Study Final Report' (1 July 2020b) <https://bit.ly/398h8g1> accessed 29 September 2020.

EC, 'First evaluation of Directive 96/9/EC on the legal protection of databases' (12 December 2005) <https://bit.ly/2WeRkKl> accessed 29 September 2020.

—— 'Communication From the Commission – Guidance on the Commission's Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive

Exclusionary Conduct by Dominant Undertakings' [2009] OJ C45/7.

—— 'Remedies in Merger Cases' (2011) Note for the OECD Working Party No. 3 on Co-operation and Enforcement <http://bit.ly/2v8yYQL> accessed 29 September 2020.

—— 'Report on Competition Policy 2017' COM(2018) 482 final <http://bit.ly/35QXmnd> accessed 29 September 2020.

ECN, 'Report on the Monitoring Exercise Carried Out in the Online Hotel Booking Sector By EU Competition Authorities in 2016' (2017) <http://bit.ly/2lGPbYl> accessed 29 September 2020.

FTC, 'Report on the Federal Trade Commission Workshop on Slotting Allowances and Other Marketing Practices in the Grocery Industry' (February 2001) <http://bit.ly/2Tp4ymG> accessed 29 September 2020.

—— 'Hearings on Competition and Consumer Protection in the 21st Century' (15 October 2018a) <http://bit.ly/2T6Bmke> accessed 29 September 2020.

—— 'Hearings on Competition and Consumer Protection in the 21st Century' (16 October 2018b) <https://bit.ly/2PyuiKE> accessed 29 September 2020.

ICN, 'Report on the Objectives of Unilateral Conduct Laws, Assessment of Dominance/Substantial Market Power, and State-Created Monopolies' (May 2007) 6th Annual Conference of the ICN <http://bit.ly/39d8fBb> accessed 29 September 2020).

—— 'Report on Abuse of Superior Bargaining Position' (April 2008) 7th Annual Conference of the ICN <http://bit.ly/3aBWS65> accessed 29 September 2020.

—— 'Unilateral Conduct Workbook – Chapter 1: The Objectives and Principles of Unilateral Conduct Laws' (April 2012) 11th Annual ICN Conference <http://bit.ly/2Vwg1lK> accessed 29 September 2020.

JFTC, 'Report Regarding Trade Practices on Digital Platforms (Business-to-Business Transactions on Online Retail Platform and App Store)' (31 October 2019) <https://perma.cc/KLL7-XXZB> accessed 29 September 2020.

OECD documents

—— 'OECD Global Forum on Competition Discusses Competition Under Fire' https://bit.ly/2zCRxPe> accessed 29 September 2020.

OECD, 'Portfolio Effects in Conglomerate Mergers' (2002) OECD Policy Roundtables DAFFE/COMP(2002)5 <https://bit.ly/2Jb5u8h> accessed 29 September 2020.

—— *Competition on the Merits* (2005) OECD Policy Roundtables <https://bit.ly/2DsxcxO> accessed 29 September 2020.

—— 'OECD Principles for Making Internet Policy' (2014) <https://bit.ly/39m989M> accessed 29 September 2020.

—— *OECD Digital Economy Outlook 2017* (OECD Publishing 2017) <https://bit.ly/3ijJfMU> accessed 29 September 2020.

—— 'Rethinking Antitrust Tools for Multi-Sided Platforms' (2018) <https://bit.ly/2CtmmqF> accessed 29 September 2020.

—— *OECD Employment Outlook 2019: The Future of Work* (OECD Publishing 2019a).

—— 'Competition Concerns in Labour Markets – Background Note' (2019b) Note for the OECD Roundtable on Competition Issues in Labour Markets DAF/COMP(2019b)2 <http://bit.ly/3aADWVl> accessed 29 September 2020.

—— Lines of Business Restrictions – Background note (2020) DAF/COMP/WP2(2020)1 <https://bit.ly/3f4oS4R> accessed 29 September 2020.

UNCTAD documents

UNCTAD, 'Competition Issues in the Digital Economy' (1 May 2019a) <http://bit.ly/2O8EhWR> accessed 29 September 2020.

—— 'Digital Economy Report 2019. Value Creation and Capture: Implications for Developing Countries' (2019b) <http://bit.ly/339TDP4> accessed 29 September 2020.

Other reports – studies

Abbas, 'How Google's Image Search Update Killed Image SEO' (15 April 2013) Define Media Group report <https://perma.cc/E78C-YYDN> accessed 29 September 2020.

Allen J and Flores N, 'The Role of Government in the Internet' (18 April 2013) Final report for the Dutch Ministry of Economic Affairs' <https://bit.ly/3d5Z4nv> accessed 29 September 2020.

Antitrust Modernization Commission, 'Report and Recommendation' (2007) <https://bit.ly/2YiKk0K> accessed 29 September 2020.

Bently L, Kretschmer M, Dudenbostel T, del Carmen Calatrava Moreno M and Radauer A, 'Strengthening the Position of Press Publishers and Authors and Performers in the Copyright Directive' (September 2017) Report commissioned by the European Parliament's Policy Department for Citizens' Rights and Constitutional Affairs <https://bit.ly/2Zxh5Hw> accessed 29 September 2020.

BEUC, 'The Role of Competition Policy in Protecting Consumers' Well-being in the Digital Era' (October 2019) <http://bit.ly/2sbDwUC> accessed 29 September 2020.

BMWi, 'White Paper on Digital Platforms. Digital Regulatory Policy for Growth, Innovation, Competition and Participation' (March 2017) <https://perma.cc/AH32-GHZN> accessed 29 September 2020.

—— 'Ein neuer Wettbewerbsrahmen für die Digitalwirtschaft Bericht der Kommission Wettbewerbsrecht 4.0' (September 2019a) < http://bit.ly/35U7xaI > accessed 29 September 2020.

—— 'Bundesministeriums für Wirtschaft und Energie, 'Entwurf eines Zehnten Gesetzes zur Änderung des Gesetzes gegen Wettbewerbsbeschränkungen für ein fokussiertes, proaktives und digitales Wettbewerbsrecht 4.0 (GWB-Digitalisierungsgesetz)' (7 October 2019b) Draft legislation < https://bit.ly/2WW53Xw > accessed 29 September 2020.

Borck J, Caminade J and von Wartburg M, 'How Large Is the Apple App Store Ecosystem?

A Global Perspective for 2019' (15 June 2020) Analysis Group <https://apple.co/2NMXBbn> accessed 29 September 2020.

BRICS Competition Law and Policy Centre, 'Digital Era Competition: A BRICS View' (2019) <http://bit.ly/2Mn4obA> accessed 29 September 2020.

CNNum, 'Neutralité des Plateformes. Réunir les Conditions d'un Environnement Numérique Ouvert et Soutenable' (May 2014) <https://bit.ly/3547SXo> accessed 29 September 2020.

—— 'Ambition Numérique : Pour une Politique Française et Européenne de la Transition Numérique' (June 2015) https://bit.ly/2qc4T06> accessed 29 September 2020.

Crémer J, de Montjoye Y-A and Schweitzer H, 'Competition Policy for the Digital Era' (2019) Report prepared for the European Commission <https://bit.ly/2uM5OmF> accessed 29 September 2020.

DCMSC, 'Disinformation and "Fake News": Final Report' (18 February 2019) <http://bit.ly/31jVgc5> accessed 29 September 2020.

dealroom.co, 'Online Travel: A Deep Dive' (June 2016) <https://perma.cc/USB9-CW5K> accessed 29 September 2020.

Deloitte, 'The Impact of Web Traffic on Revenues of Traditional Newspaper Publishers. A Study for France, Germany, Spain, and the UK (2016) Report commissioned by Google <https://perma.cc/GHK9-5X8C> accessed 29 September 2020.

Ecorys, 'Business-to-Business relations in the online platform environment' (2017) FWC ENTR/300/PP/2013/FC-WIFO <https://bit.ly/2J3uUDT> accessed 6 August 2020.

ESEC, 'Towards a European Digital Sovereignty Policy' (March 2019) <https://bit.ly/33BzBB0> accessed 29 September 2020.

ESMA, 'ESMA's Supervision of Credit Rating Agencies and Trade Repositories 2015 Annual Report and 2016 Work Plan' (5 February 2015) ESMA/2016/234 <https://bit.ly/3aPI05s> accessed 29 September 2020.

Feld H, 'The Case for the Digital Platform Act: Market Structure and Regulation of Digital Platforms (May 2019) Roosevelt Institute <https://bit.ly/30iwQ4j> accessed 29 September 2020.

Field F and Forsey A, 'Delivering justice? A report on the pay and working conditions of Deliveroo riders' (2018) <https://perma.cc/V2PJ-MQUL> accessed 29 September 2020.

Fisher C, Park S, Lee YL and others, 'Digital News Report: Australia 2019' (June 2019) Canberra: News and Media Research Centre <https://bit.ly/2ZuNcIl> accessed 29 September 2020.

Fisher R, Misojcic M, Chicot J and others, 'Study in Support of the Evaluation of the Database Directive. Final Report' (2018) <https://bit.ly/2SOsS0u> accessed 29 September 2020.

Franck J-U and Peitz M, 'Market Definition and Market Power in the Platform Economy' (May 2019) Centre on Regulation in Europe report <https://bit.ly/2OtaCHj> accessed 29 September 2020.

French Council of the State, 'Le Numérique et les Droits Fondamentaux' (2014)

<https://bit.ly/31q2Iof> accessed 6 August 2020.

French Parliament (Commission for reflections and proposals on the law and freedoms in the digital age), 'Numérique et Libertés : Un Nouvel Âge Démocratique' (October 2015) Report n° 3119 <http://bit.ly/2qfH5sp> accessed 29 September 2020.

French Senate, 'Rapport Fait au Nom de la Commission d'enquête sur la Souveraineté Numérique - Tome I : Rapport' (1 October 2019) <https://bit.ly/2NJh9Ox> accessed 29 September 2020.

Furman J, Coyle D, Fletcher A, Marsden P and McAuley D, 'Unlocking digital competition. Report of the Digital Competition Expert Panel' (March 2019) <http://bit.ly/2xYsQsc> accessed 29 September 2020.

German, French and Polish economic ministries, 'Modernising EU Competition Policy' (4 July 2019) <http://bit.ly/2N24dlf> accessed 29 September 2020.

HoL (Select Committee on Communications), 'Online Platforms and the Digital Single Market', 10th Report of Session 2015-16, 20 April 2016 <https://bit.ly/3gzGGWv> accessed 29 September 2020.

— — 'Regulating in a Digital World' (9 March 2019) 2nd Report of Session 2017-19 <http://bit.ly/2NtVmsM> accessed 29 September 2020.

IGF and CGE, 'La Politique de la Concurrence et les Intérêts Stratégiques de l'UE' (4 April 2019) Report for the French Ministry of Economy and Finance <https://bit.ly/38FyoJs> accessed 29 September 2020.

IMF, 'World Economic Outlook: Growth Slowdown, Precarious Recovery' (April 2019) <https://bit.ly/3acayG8> accessed 29 September 2020.

Monopolkommission, 'Competition policy: The challenge of digital markets' (2015) Special Report No 68 by the Monopolies Commission pursuant to section 44(1)(4) of the Act Against Restraints on Competition <https://perma.cc/6B3V-55QT> accessed 29 September 2020.

Paes de Barros R, Ferreira FHG, Molinas Vega JR and Saavedra Chanduvi J, *Measuring Inequality of Opportunities in Latin America and the Caribbean* (World Bank 2009) <https://bit.ly/2C9CYnC> accessed 29 September 2020.

Schegg R, 'European Hotel Distribution Study. Results for the Reference Year 2017' (2018) Hotrec study <https://perma.cc/J7Z3-ZBPC> accessed 29 September 2020.

Schweitzer H, Haucap J, Kerber W and Welker R, 'Modernisierung der Missbrauchsaufsicht für marktmächtige Unternehmen. Endbericht' (29 August 2018) Report No 66/17 commissioned by the Federal Ministry of Economics and Energy (BMWi) <http://bit.ly/35GBbAk> accessed 29 September 2020.

Stigler Committee on Digital Platforms, 'Final Report' (September 2019) <http://bit.ly/2oKaN88> accessed 29 September 2020.

Study Group on Improvement of Trading Environment surrounding Digital Platforms, 'Improvement of Trading Environment surrounding Digital Platforms' (12 December 2018) Interim Discussion Paper <https://perma.cc/9CZ4-6ACX> accessed 29 September 2020.

Taylor M, Marsh G, Nicol D and Broadbent P, 'Good work: the Taylor review of modern working practices' (2017) Report to the UK Government <https://bit.ly/2q4SFCm>

accessed 29 September 2020.

van Gorp N and de Bijl P, 'Digital Gatekeepers. Addressing Exclusionary Conduct' (7 October 2019) Report commissioned by the Dutch Ministry of Economic Affairs and Climate Policy <https://bit.ly/3cFYpJW> accessed 29 September 2020.

Wilikens M, Dewar M, Celikel Esser F and others, 'What Makes a Fair Society? Insights and Evidence' (2017) JCR Report <https://bit.ly/3eaCR9i> accessed 29 September 2020.

World Bank, *World Development Report 2019: The Changing Nature of Work* (World Bank 2019) <https://bit.ly/2PwRzwc> accessed 29 September 2020.

Speeches and lectures

Almunia J, 'Statement on the Google Investigation' (5 February 2014) <http://bit.ly/2OWD7ye> accessed 29 September 2020.

Delrahim M, '"…And Justice for All": Antitrust Enforcement and Digital Gatekeepers' (11 June 2019) Remarks for the Antitrust New Frontiers Conference <https://bit.ly/2KJ6B0I> accessed 29 September 2020.

Draghi M, 'Verbatim of the Remarks Made by Mario Draghi' (26 July 2012) Speech delivered by Mario Draghi, President of the European Central Bank at the Global Investment Conference <http://bit.ly/2TFEP9z> accessed 29 September 2020.

Finch A, 'Principal Deputy Assistant Attorney General Andrew Finch Delivers Introductory Remarks at the 2018 Antitrust Writing Award Ceremony' (12 April 2018) <http://bit.ly/31u9aZh> accessed 29 September 2020.

Juncker J-C, 'State of the Union 2016' (14 September 2016) <https://bit.ly/2Fh7qxb> accessed 29 September 2020.

Laitenberger J, 'Le Numérique et la Concurrence dans une Economie et une Société en Transformation' (24 November 2017) Colloque de l'Autorité de la concurrence < https://bit.ly/2zDsKGT > accessed 29 September 2020.

Leary TB, 'Freedom as the Core Value of Antitrust in the New Millennium' (6 April 2000) Speech delivered at the ABA Antitrust Section 48th Annual Spring Meeting, Chair's Showcase Program, Antitrust at the Millennium: Looking Back and Moving Forward <https://perma.cc/T7BU-2A59> accessed 29 September 2020.

Lowe P, 'Consumer Welfare and Efficiency – New Guiding Principles of Competition Policy?' (27 March 2007) 13th International Conference on Competition and 14th European Competition Day <http://bit.ly/2TjSr9d> accessed 29 September 2020.

Madero Villarejo C, 'Antitrust in Times of Upheaval' (10 December 2019) Speech delivered at the 2019 CRA Conference <http://bit.ly/3caCbQp> accessed 29 September 2020.

Moneta ET, 'Nobel Lecture: Peace and Law in the Italian Tradition' (25 August 1909) Nobelprize.org. Nobel Media AB 2014 <https://bit.ly/2KBgu1E> accessed 29 September 2020.

Rosch TJ, 'Monopsony and The Meaning of "Consumer Welfare," a Closer Look at Weyerhaeuser' (7 December 2006) Speech delivered at the 2006 Milton Handler

Annual Antitrust Review <https://bit.ly/2MK3g1u> accessed 29 September 2020.

—— ‘Rewriting History: Antitrust Not as we Know it…Yet’ (Speech before the ABA Antitrust Section 2010 Spring Meeting, Washington D.C., 23 April 2010) <https://goo.gl/hW16pk> accessed 29 September 2020.

Vestager M, ‘Setting Priorities in Antitrust’ (1 February 2016a) Speech delivered at the GCLC <https://bit.ly/3gx4Bpw> accessed 29 September 2020.

—— ‘Competition is a Consumer Issue’ (Speech delivered at the BEUC General Assembly, 13 May 2016b) <https://bit.ly/2w3uVpi> accessed 29 September 2020.

—— ‘Competition and the Digital Single Market’ (Speech delivered at the Forum for EU-US Legal-Economic Affairs, Paris, 15 September 2016c) <https://bit.ly/3axnJRd> accessed 29 September 2020.

—— ‘Competition and a Fair Deal for Consumers Online’ (26 April 2018) Speech delivered at the Netherlands Authority for Consumers and Markets Fifth Anniversary Conference <https://bit.ly/2VjYwn2> accessed 29 September 2020.

—— ‘Dealing with Power in a Brave New World: Economy, Technology and Human Rights’ (18 March 2019a) address delivered at the Anna Lindh Lecture <https://bit.ly/2XjSLbx> accessed 29 September 2020.

—— ‘Defending Competition in a Digitised World’ (4 April 2019b) Speech delivered at the European Consumer and Competition Day’ <http://bit.ly/2VXAksl> accessed 29 September 2020.

—— ‘Competition and the Rule of Law’ (10 May 2019c) Speech delivered at the European Association of Judges <https://bit.ly/2xo55MQ> accessed 29 September 2020.

—— ‘Competition and Sustainability’ (24 October 2019d) Speech delivered at the GCLC Conference on Sustainability and Competition Policy <https://bit.ly/2QIUUJB> accessed 29 September 2020.

—— ‘Building a Positive Digital World’ (29 October 2019e) Speech delivered at the Digital Summit <http://bit.ly/2IvI7pG> accessed 29 September 2020.

—— ‘Digital Power at the Service of Humanity’ (29 November 2019f) Speech delivered at the Conference on Competition and Digitisation <http://bit.ly/3aKiehT> accessed 29 September 2020.

—— ‘Competition in a Digital Age: Changing Enforcement for Changing Times’ (ASCOLA Annual Conference, 26 June 2020) <https://bit.ly/2NHfOXU> accessed 29 September 2020.

Other

—— ‘Academics against Press Publishers’ Right:169 European Academics warn against it’ (2018) <https://bit.ly/30mllJ4> accessed 29 September 2020.

Alphabet, ’Annual Report (Form 10-K) (3 February 2020) <https://bit.ly/3kdrTmF> accessed 29 September 2020.

Apple, ‘Apple And Google Partner on COVID-19 Contact Tracing Technology’ (10 April 2020) Press release <https://apple.co/2Ap72uc> accessed 29 September 2020.

Barnett J, Baye MR, Cooper J C and others, 'Joint Submission of Antitrust Economists, Legal Scholars, and Practitioners to the House Judiciary Committee on the State of Antitrust Law and Implications for Protecting Competition in Digital Markets' (18 May 2020) <https://ssrn.com/abstract=3604374> accessed 29 September 2020.

BDZV and VDZ, 'Press Publishers' Response to Google's Third Commitments Proposal. European Commission's Competition Investigation of Google – AT.39.740' (4 September 2014) <https://perma.cc/Y59C-6ZXJ> accessed 29 September 2020.

Booking Holding, 'Annual Report (Form 10-K)' (26 February 2020) <https://bit.ly/30Gj4KI> accessed 29 September 2020.

Business Roundtable, 'Statement on the Purpose of a Corporation' (September 2019) <https://perma.cc/87PU-E695> accessed 29 September 2020.

Capital Forum, 'Amazon: EC Investigation to Focus on Whether Amazon Uses Data to Develop and Favor Private Label Products; Former Employees Say Data Key to Private Label Strategy' (5 November 2018) <https://perma.cc/4XRW-TGTC> accessed 29 September 2020.

Dow Jones, 'Comment of Dow Jones & Company to the Federal Trade Commission' (20 August 2018) Hearings on Competition and Consumer Protection in the 21st Century <https://perma.cc/82HK-L4YY> accessed 29 September 2020.

European Publishers Council, 'Public Comments of the European Publishers Council submitted in the context of the FTC "Hearings on Competition and Consumer Protection in the 21st Century"' (20 August 2018) <https://perma.cc/AG2M-2UBA> accessed 29 September 2020.

FairSearch, 'Google's Transformation From Gateway to Gatekeeper: How Google's Exclusionary and Anticompetitive Conduct Restricts Innovation and Deceives Consumers' (2011) <https://perma.cc/S9HM-DZW9> accessed 29 September 2020.

GCR, 'Rating Enforcement 2020' (August 2020) <https://bit.ly/2RjA7wi> accessed 29 September 2020.

Getty Images, 'Letter to Commissioner Vestager' (2016) <https://perma.cc/6LGW-KCAE> accessed 29 September 2020.

—— 'Submission to the ACCC Digital Platforms Inquiry Issues Paper' (10 April 2018) <https://perma.cc/U9AJ-YGLS> accessed 29 September 2020.

Google, 'How Search Algorithms Work' (2019) <http://bit.ly/32rIJFs> accessed 29 September 2020.

—— 'Annual Report (Form 10-K) (28 March 2005) <https://bit.ly/3fHz4jD> accessed 29 September 2020.

Hilty RM, Köklü K and Moscon V, 'Position Statement of the Max Planck Institute for Innovation and Competition on the "Public consultation on the role of publishers in the copyright value chain"' (15 June 2016) <https://bit.ly/395RQPC> accessed 29 September 2020.

Montgomery NJ, 'The Legends of the Galaxy Play Rules' (16 January 2018) <https://bit.ly/2lwCLSD> accessed 29 September 2020.

News Corp Australia, 'Submission to the ACCC's Digital platform inquiry' (20 April

2018) <https://perma.cc/6MQL-DRCS> accessed 29 September 2020.

Perry Barlow J, A Declaration of the Independence of Cyberspace' (1996) <https://bit.ly/1KavIVC> accessed 29 September 2020.

Raff A and Raff S, 'Penalties, Self-Preferencing, and Panda: Why Google's behavior Makes Antitrust Sanctions Inevitable' (31 August 2011) *Foundem* <https://bit.ly/2kfyzqi> accessed 29 September 2020.

Warren E, 'When Amazon can tilt the online marketplace in its own favor, small businesses see an immediate impact in their profits. That can be absolutely crushing, it's not fair, and I'm fighting to end that' (*Twitter*, 24 April 2019) <https://bit.ly/3hu8sod> or (if deleted) <https://bit.ly/2SayDoC> accessed 29 September 2020.

Yelp, 'Letter to FTC Chairman Maureen Ohlhausen' (11 September 2017) <https://perma.cc/FW8C-E5QP> accessed 29 September 2020.