Consumer law enforcement as a tool to bolster competition in digital markets: a case study on personalized pricing

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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Competition and Consumer Protection Policies

for Inclusive Development in the Digital Era

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NOTE

Considering the important role of research and policy analysis in the development of appropriate policies and legislation in the areas of competition and consumer protection, UNCTAD created the Research Partnership Platform (RPP) in 2010. The UNCTAD RPP is an initiative that aims at contributing to the development of policies and best practices to promote effective law enforcement for competitive markets and inclusive development. The RPP is coordinated by Ebru Gökçe Dessemond under the general guidance of Teresa Moreira.

The RPP brings together research institutions, universities and civil society, and provides a platform for joint research and exchange of ideas amongst scholars and practitioners on the issues and challenges in the area of competition and consumer protection faced particularly by developing countries and economies in transition.

The role of UNCTAD is to facilitate and provide guidance on the research and analysis to be undertaken by members of RPP. UNCTAD benefits from the research findings in responding to the challenges faced by developing countries through its technical assistance and capacity-building activities.

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CONTENTS

EXECUTIVE SUMMARY

The global economy is in the midst of dramatic changes. The emergence of the digital economy has led, in turn, to the emergence of new business models. While these online platforms offer multiple benefits, their market power and its potential abuse poses serious challenges for both markets and for consumers. The increasingly entrenched market power of these online platforms, if they remain unregulated, poses the threat that markets may become monopolistic. And the challenge for consumers is the collection and use of their data. To address these challenges and ensure competitive, open and accessible digital markets, it is high time that governments find effective ways to regulate these businesses, while preserving the benefits they offer and excising the threat of market over-concentration.

These new forms of regulation need to be carefully curated, and it is unlikely that there will be a "one size fits all" solution that all countries can effectively apply. Some countries have opted for new laws or regulations that are designed specifically for the digital economy, to effectively regulate these new forms of business. Others have chosen to adjust the existing competition law framework to restore competition and address the emerging challenges in digital markets. Countries should take this opportunity to learn from one another to find effective methods of enhancing competition in digital markets and better protecting consumers. This is uncharted territory for everyone, and it would be beneficial for competition and consumer protection authorities to cooperate with one another as well as with other relevant government ministries and sector regulators. In fact, to do so would guarantee policy coherence and consistent regulation that will not harm businesses, not prevent innovation and better protect the consumer.

This book is the result of research conducted by the UNCTAD Research Partnership Platform (RPP) into these issues of competition and consumer protection that are arising in the digital economy and how to address them.

Chapter 1 discusses the dramatic change in the global economy arising from digitalization and the rapid growth of digital platforms due to their access to data, and the implications for competition in these markets. While it is clear that consumers have benefited greatly from the expansion of digital businesses and from the low or zero cost of many digital services, there remains the justified fear that reliance on these businesses has led to the concentration of market power in the hands of a few digital firms. Moreover, the Covid-19 pandemic has increased the use of digital platforms, reinforcing their market position even further and as a result increasing concerns about their potential anticompetitive conduct.

Chapter 2 continues this discussion, examining how current competition law may not be sufficient in regulating digital businesses. As a result, enforcement agencies will likely have to incorporate a new approach to adequately protect consumers from threats to their privacy and from the monopolistic effects of these businesses. While consumer protection and competition metrics are generally used separately, it is argued that fusing them would be particularly effective in protecting citizens from businesses that present such a dual threat. In fact, many studies have demonstrated that this method will ultimately be more effective than the existing approaches. This new approach may also require online businesses to incorporate a fairness-by-design approach, that puts consumers on even footing with the firm while on the platform. It is only by taking these, and other, innovative and complementary steps that competition can be restored and enhanced effectively.

Chapter 3 examines the sharing economy, a new business structure that has formed over digital platforms, and its effect on competition. The sharing economy is characterized by the shared use of capital assets using a digital platform. The lack of relevant law and rapid growth of these businesses has allowed them to control the markets they have created with little oversight. They have thus become a powerful and disruptive force in traditional markets. Nonetheless, regulators should not be hasty in their approach to these new ways of doing business. Rather, they should continue to weigh the costs and benefits of sharing economy businesses and look for ways to protect both the employees and consumers of these businesses while allowing for the latter to continue operating and innovating.

Chapter 4 and Chapter 5 each provide individual country perspectives on addressing some of the challenges arising from digital businesses. Chapter 4 focuses on the South African experience. Like many other countries, South Africa has benefited from the rapid growth of ecommerce. However, the expansion of digital platforms has aggravated the problems of exclusion and market over-concentration in the digital economy. To remedy these ills, the chapter suggests fresh approaches for enhancing competition, many of which could be used across the developing world. One such idea is partnering with current businesses to assist in increasing public access to Internet. This would bring new customers to the businesses, while also allowing citizens to take advantage of Internet access to create their own businesses. The goal of these policies is not simply to end anticompetitive activity today, but rather to shape the future of more innovative, competitive and inclusive economies for the benefit of all people.

Chapter 5 addresses Brazil's approach to the rise of digital firms. Brazil has set up an agency that specializes in data protection. This new body, the National Data Protection Agency, will protect consumers' privacy with a mix of new ideas regarding data protection. The idea is that the new agency and the competition authority can share information and assign cases in a way that best promotes competition while placing a premium on consumer protection. While this more comprehensive approach is encouraging as a baseline for issues in the new economy, it is unlikely that one country's agency will be successful when acting alone. Rather, the global reach of these companies requires a global enforcement strategy with different countries attempting to harmonize their agencies and responses.

Overall, it is clear that further research will have to be conducted as the digital economy continues to grow and evolve, and as new approaches are developed. As pointed out in each of the chapters, governments will have to be creative. New laws will have to be thoughtfully tailored to protect consumers while also promoting competitive, accessible and open digital markets and maintaining the benefits of these businesses in the global community. Doing so will undoubtedly be a long and difficult process. Nonetheless, this publication represents an important first step towards understanding the various aspects and dynamics at play in digital markets. It provides innovative approaches and different perspectives to addressing the emerging competition and consumer protection challenges in the digital economy in an overall effort to contribute to inclusive economic development.

CHAPTER I: THE DIGITAL ECONOMY, BIG DATA AND COMPETITION

Patrick L. Krauskopf, Fabio Babey and Maximilian Diem

A. Introduction

The Covid-19 global pandemic has changed the world. Widespread national lockdowns have forced millions of the world's workers and consumers to work and shop from home. This phenomenon would have been barely possible without the technologies of the digital economy. In the past (even the recent past), many companies and employees were sceptical about arrangements such as home office or online conferences. This attitude is likely to change; many companies have already announced that they will allow employees to use home offices on a more permanent basis.

Because of the scale of this shift, it is likely that the global pandemic will act as a catalyst for even more technological change. However, even before Covid-19, the far-reaching changes brought about by digital technologies triggered concerns among governments and policymakers that a small number of large firms might, in effect, control and influence aspects of the lives of billions.

Most digital market services are provided through online platforms. These online platforms operate according to the so-called two-sided market model. In this business model, the platform acts as the facilitator for interactions between the different user groups such as players and programmers, advertisers and users of search engines, and credit-card holders and retailers. Platform-based businesses benefit from the use of algorithms as they can make use of big data to increase their market share and expand their business to a new adjacent market. Businesses with considerable quantities of data sets enjoy a competitive advantage, as algorithms lead to better results if they are fed with considerable amounts of information or data.[1]

The combination of network effects, economies of scale and scope, and access to and control over data, make digital markets susceptible to market concentration. From an economic perspective, fixed costs can play a key role in digital markets, as the production of information requires fixed costs but few marginal costs, which leads to increasing returns to scale. Network effects favour large market players, allowing them to benefit from their strong relationship with, and reach to, an ever-increasing number of users. This, in turn, makes new market entry difficult, and certainly unlikely in the future on any significant scale.

From a competition policy perspective, competition problems arising in digital markets tend to be more technical in nature, compared to those found in conventional markets. But it is not just one characteristic that makes the digital economy exceptional; it is, rather, a combination of many features that policymakers, governments and authorities have not previously encountered.[2]

1. "Big data" and "digitalization" defined

Although the term "big data" is used frequently in both academia and industry, there is no single definition for it. Big data is used to describe a variety of different concepts. For example, while the term refers to the technological ability to store, aggregate and process data on a large scale, it is also used with reference to the major cultural shift that is happening in business and society more generally.[3]

The concept of big data was originally related to the management and processing of very large datasets. This means that when a dataset reaches a particular size, standardized database software does not have the capability to capture, store,

[1] Tirole J (2017). *Economics for the Common Good*. Princeton University Press, Princeton: 379; OECD (2017), Algorithms and collusion: Competition policy in the digital age: 24-31.

[2] Stigler Committee on Digital Platforms (2019). Final report: 34.

[3] Mauro De. A, Greco M and Grimaldi M (2015). What is big data? A consensual definition and a review of key research topics. AIP Conference proceedings 1644: 97–99.

manage and analyse it. However, big data is not defined by the size of a dataset alone, which in some cases only plays a subordinate role. It is determined also by the sum of the individual measured values, how the data are used, and the resulting complexity. An example of this is the evaluation and management of real-time data from many sensors; managing these datasets is often more challenging than processing a video collection of the same size in number of bytes.[4]

In order to distinguish big data from data in general, the OECD proposes to follow the definition of the "3Vs":[5] the volume of data; the velocity at which data is collected, used and disseminated; and the variety of information aggregated.[6] Stucke and Grunes add a fourth V to the definition, namely, the value of the data. At the level of personal data, the authors point that over the past decade, each "V" has increased in magnitude, and this trend is expected to continue.[7]

Some companies are already able to retrieve, process and analyse data in real time. This leads to a new phenomenon commonly referred to as now-casting. Now-casting allows a company to identify a potential competitor by, for example, identifying the number of downloads of an application from a digital app store and matching them with online usage or search preferences. The ability to now-cast may therefore be a lever against new entrants.[8]

Big data's value is both a cause and a consequence of the increase in volume, variety and velocity. While data may be "free" – depending on how they are collected – the process by which information is extracted from the data is what generates value.[9]

Like big data, the term "digitalization" has a wide spectrum of definitions.[10] Generally, and for the purposes of this paper, the term refers to the digitalization of existing processes or products.[11]

2. Big data and digitalization in the competitive analysis

Data are ubiquitous, often inexpensive and reasonably easy to capture. Users are constantly creating data, as the increasing use of the Internet and smartphones and other smart devices means that consumers are continually leaving traces of their needs and preferences.[12] As the amount of data collected by firms is increasing, the question of whether big data has significant implications for competition analysis is attracting more and more attention from academics, policymakers, competition authorities and regulators.[13] As it is a complex subject, there are no simple answers. The rest of this discussion therefore aims to shed light on some of the complexities.

This introductory chapter is structured as follows: Section B looks at the opportunities for competitiveness in the digital economy; Section C discusses the challenges for competitiveness that the digital economy presents, while forms of conduct that undermine competition are reviewed in Section D; Section E looks at the issue of mergers; and Section F asks whether there is a need for legislative changes. Section G concludes.

B. Opportunities for competitiveness

Data have always played an important role in business. In the "old economy", customer data were an important source of information for virtually any undertaking, such as delivering advertisements to potential clients, predicting their shopping preferences

4 OECD (2015). *Data-driven Innovation: Big Data for Growth and Well-being.* Paris: 11.

5 OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era*. Paris: 5.

6 OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era*. Paris: 5 ff.

7 Stucke ME and Grunes AP (2016). *Big Data and Competition Policy*. Oxford University Press, Oxford: 11; McKinsey Global Institute [MGI] (2011). Big data: The next frontier for innovation, competition and productivity: 27–37; OECD (2016). Big data: Bringing competition policy to the digital era. Paris: 11.

8 Stucke ME and Grunes AP (2016). *Big Data and Competition Policy*. Oxford University Press, Oxford: 11

9 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 8; OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era*: 5 ff.

10 UNCTAD (2019) *Digital Economy Report 2019*: *Value Creation and Capture: Implications for Developing Countries*. United Nations publication. New York and Geneva.

11 Parviainen P, Tihinen M, Kääriäinen J and Teppola S (2017) Tackling the digitalization challenge: How to benefit from digitalization in practice. *International Journal of Information Systems and Project Management.* 5(1):63–77.

12 Sokol D and Comerford R (2016). Antitrust and regulating big data. *23 Geo, Mason L. Rev:* 1129: 1136.

13 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 8; OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era:* 8.

or spending capacity, and analysing a company's staff performance.[14]

In terms of the "new economy", consumers have certainly benefited from digital platforms using big data, notably through *prima vista* free user services, improved quality of products and services, and rapid rates of innovation. And online firms use data to improve and refine products and services in various ways and to develop innovative products. For example, search engines, both general and niche, can use data to deliver more relevant, higher-quality search results. Search engines can learn from user queries and clicks and identify the most relevant results for a query.[15] Click-and-query data, as it is known, is a very valuable contribution to delivering high-quality search results. Beyond providing and improving search relevant results, search engines can use data to provide additional value-added services to users. For example, travel search engines can use data to predict price trends on flights for specific routes. E-commerce sites use prior purchase information and browser history information to provide personalized shopping recommendations to users.[16]

Perhaps the most obvious and widespread advantage is the ability of digital firms to provide services to consumers at zero-price on one side of the platform, and the possibility to monetize data from consumers on the other side of their business.[17] From a competition policy perspective, where lower prices are highly desirable for consumers, this is undoubtedly a benefit.[18]

From an economic and businesses point of view on the part of digital firms, the monetization of data in the form of targeted advertising sales is not per se suspicious or harmful, but rather rational, profit-maximizing behaviour that is of benefit to consumers. If online platforms are prevented or restricted from collecting and monetizing consumer data, competition would be hampered, and consumers would be harmed by higher prices for services.[19]

C. Challenges for competition

Although the digital economy undoubtedly brings with it a multitude of positive developments, there are several reasons why governments, decision-makers and competition authorities are rightly concerned.

For one, many services offered by digital firms are not truly free. Consumers pay with their data and privacy. Moreover, due to a lack of transparency and information asymmetry, consumers often do not know how much they are paying for these services.[20]

Both in the literature and in the decision-making practice of the European Commission and in the last amendment to the Act against Restraints of Competition in Germany, it has been made very clear that the exchange between the users of big data services, even if they appear to be free of charge *prima vista*, take place in a market. In fact, users pay for the services with their data, even if the data are not actively given away or the users of the service are not fully aware of the extent to which they are giving away data. The data are indeed valuable for digital platforms concerned as they monetize data in a targeted advertising market.[21]

Firms can use the velocity of data collection to identify trends well ahead of others. By observing search queries, large search engines might even predict flu outbreaks ahead of government health authorities. Some platforms through now-casting (for instance, observing trends in their proprietary data as consumers surf the web) can now monitor emerging business models in real-time. In assessing these trends, firms can quickly identify and counter emerging competitive threats. Such firms can also acquire small but promising start-ups before they pose a competitive threat, or use other means, such

14 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 8; OECD (2016). OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era:* 9.

15 OECD (2016). *Big Data: Bringing Competition Policy to the Digital Era*. Paris: 17.

16 Parviainen P, Tihinen, Kääriäinen J and Teppola S (2017) Tackling the digitalization challenge: How to benefit from digitalization in practice. *International Journal of Information Systems and Project Management.* 5(1):63–77.

17 UNCTAD (2019) *Digital Economy Report 2019*: *Value Creation and Capture: Implications for Developing Countries*. United Nations publication. New York and Geneva.

18 Sokol D and Comerford R (2016). Antitrust and regulating big data. *23 Geo, Mason L. Rev:* 1129: 1132.

19 Sokol D and Comerford R (2016). Antitrust and regulating big data. *23 Geo, Mason L. Rev:* 1129: 1133.

20 Stucke ME and Grunes AP (2016). *Big Data and Competition Policy*. Oxford University Press, Oxford: 8.

21 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 110.

as predatory pricing, to weaken their market position and hamper their growth.[22]

A review of the existing literature highlights two key issues connected to the digital economy as cause for concern: (i) the collection and exploitation of data could raise barriers to entry for potential competitors and hence lead to market concentration; and (ii) the collection of big data may enhance market transparency, which, in turn, facilitates collusion between firms.

D. Forms of conduct that raise competition concerns

There are several types of data-related conduct that might raise competition concerns. These are collusion, abuse of market power, the refusal to provide access to data, exclusive contracts and price discrimination. Each is discussed separately below.

1. Collusion

a. Data, market transparency and competition

The rising rate of collection and application of electronic data are often linked with increased market transparency. Such transparency has ambitious results for the operation of markets and offers both benefits and detriments. Consumers benefit from greater market transparency where it helps them to easily compare characteristics or prices of competing goods or services. For example, price or quality comparators allow users to make more informed choices, resulting in fierce competition in terms of quality and price.[23]

Market places are another example of the benefits that market transparency may bring. Large digital marketplaces host many online stores, including smaller ones, which may have been hindered in reaching online consumers without the presence of these platforms. Moreover, they enable the comparison of prices and conditions offered by their hosted retailers, thus leading to increased market transparency. In some cases, more market transparency may facilitate the entry of new market participants as they have additional information regarding consumer needs and market requirements.[24]

In contrast, increased data collection, notably concerning competitors' pricing, may also be used by firms in a way that impedes competition. Market transparency may under certain circumstances encourage tacit or explicit collusion.[25] By facilitating the discovery of a deviation from an arrangement, market transparency lowers the expected profit resulting from such deviation. As a result, firms might be incentivized to collude in order to maximize the profits from such deviations. To a certain degree, the increasing accessibility of data on prices online, and the fact that these data are displayed in real time, could result in an unprecedented degree of market transparency in online markets. Data collection can additionally promote collusion when data are used to fix prices through the use of algorithms.[26]

b. Excursus: Algorithms

One of the more complex problems in competition law and policy is whether smart, self-learning, price-setting calculations might cause or expand collusive behaviour in certain markets. It is suspected that self-learning algorithms, by observing the pricing behaviour of algorithms employed with their competitors, could learn over a brief period to harmonize prices and act as a cartel to maximize the joint benefit of the businesses using algorithms. It is assumed that this type of algorithmic collusion may occur not only in markets with a couple of participants but also in markets having a larger selection of firms. This new form of collusive behaviour gives rise to some new issues concerning competition law. These issues include the definition of an arrangement in a liability context, the monitoring of algorithms and law enforcement in the case of algorithmic collusion.[27]

[22] Stucke ME and Grunes AP (2016). *Big Data and Competition Policy*. Oxford University Press, Oxford: 8.

[23] Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 14.

[24] Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 14.

[25] Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 14.

[26] Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 14.; OECD (2017) *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 24–31.

[27] Schwalbe U (2016). Algorithms, machine learning, and collusion. *Journal of Competition Law & Economics* (14)4: 568–607; Keil FC and Wilson RA (2005). *The MIT Encyclopedia of the Cognitive Sciences*. The MIT Press: Cambridge.

In competition law, collusion is the deliberate cooperation of companies to achieve anticompetitive outcomes. In most competition laws, an agreement is a prerequisite for the application of the competition rules. The term is purposely defined broadly to ensure an effective competition law enforcement.[28] An anticompetitive collusion can be achieved, for example, by increasing prices or influencing the quantities of products available on the market. If the other general competition conditions are fulfilled, such conduct – even if it is carried out with the aid of, or by, algorithms – could constitute a violation of the prohibition of restrictive agreements.[29] The essential question for competition law is whether an algorithm or artificial intelligence has the ability to independently create new results that are no longer clearly predetermined or predictable due to the initial programming.[30]

In line with the international decision-making practice, three case groups can be broadly distinguished.[31]

The first case category consists of the so-called "predictable agent". In this case, the price adjustment is carried out not with a company's prior intention to coordinate prices using price signals, but automatically. Due to the advanced programming of the algorithms, "the ideal market behaviour" is made possible. However, if such a system is used by competing companies, the prices may also converge. In these cases, neither a third party (which sells the same software to several competitors) is involved nor is the price alignment the result of price signals on the market. Another scenario – though probably not realistic at this stage – is the case in which algorithms independently interconnect with each other and enter into agreements restricting competition.[32]

In the second case category, algorithms are used as mere instruments to implement a previously concluded agreement between undertakings. In this context, the decisions of the US Department of Justice (DOJ)[33] and the UK Competition Markets Authority (CMA) regarding the poster cases in which competing merchants agreed by e-mail to make certain price adjustments on the Amazon online marketplace by means of a specific repricing-software are pertinent. The use of a specific repricing-software was necessary for this purpose as the prices on the platform changed too often for the adjustments to be made by conventional means. This type of case is easy to grasp under competition law, where a clear agreement between companies that is against the law can be identified. Whether this is done conventionally or by algorithms is not relevant under competition law.

Another category of cases concerns a possible restriction of competition due to the exploitation of the same algorithm by competitors. If the application of special algorithms has a massive influence on price formation, the use of the same algorithm by competitors leads to similar price dynamics in the market and therefore to price convergence between these companies. Depending on how the party that provides the algorithm in question is positioned in the market, a hub-and-spoke cartel might be the consequence. In such cases, the competitors do not agree directly; rather, agreements on price, and terms and conditions are reached via a third-party company or a platform acting on a different market level.[34]

Whether Article 101 of the Treaty on the Functioning of the European Union (TFEU) needs to be extended is a question for debate, as algorithms would gradually explore the conceptual boundaries between mere parallel behaviour and illegal coordination. It should be noted that the potentially expanding risks of tacit collusion arising from the use of algorithms raise the question of whether the current case law regarding parallel behaviour is able to catch such new phenomena. It has been recommended that certain plus-factors which are commonly characterized as positive (avoidable) activities by market players that enable a better coordination between companies, should be sanctioned.[35]

28 OECD (2017). *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 36.

29 See Article 101 TFEU; Stigler Committee on Digital Platforms (2019): 81; OECD (2017) *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 36.

30 Keil FC and Wilson RA (2005). *The MIT Encyclopedia of the Cognitive Sciences*. The MIT Press: Cambridge OECD (2017) *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 36.

31 OECD (2017) *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 24–31.

32 OECD (2017) *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 31–32.

33 DOJ (21. 12. 1992). Complaint, U.S. v. American Airlines; ECJ (21. 1. 2016). C-74/14, Eturas.

34 OECD (2017). *Algorithms and Collusion: Competition Policy in the Digital Age*. Paris: 27.

35 Autorité de la Concurrence and Bundeskartellamt (2019). *Algorithms and Competition*: 75.

2. Abuse of market power

Market power is commonly described as a company's position of preponderance in the relevant market, influencing the conduct of competitors or subtracting their influence through independent conduct. Market power is usually associated with a company's capacity to influence a competition dynamic in order to be able to set its prices above the marginal cost. Competition law frequently uses the term dominant position as a synonym for market power, and establishes objective criteria to measure its existence.[36]

The market power of digital companies has raised some questions. It is questionable whether the current legal framework is sufficient to provide effective remedies or whether legal changes are necessary.

a. Data as a source of market power

In the digital economy, access to data is vital for firms to remain competitive. Control over big data by incumbent digital companies can result in market entry barriers for new entrants, as they are not able to collect or to buy access to required datasets to compete with established digital companies.[37]

Firms accumulate data in various ways. Information might be intentionally given by consumers to a company. Alternatively, firms can track data from the interaction of potential consumers with the company, for instance when an online retailer monitors items that a potential consumer has viewed without purchasing them. In all these cases the firm has control over the collection of the data, as it is involved in a direct relationship with the consumer or potential consumer. Where a direct relationship between a firm and the consumer exists, firms have access to first-party data. New market entrants usually do not have a large customer basis and hence will typically collect fewer data than their established counterparts. When firms do not have access to first-party data, they may use third-party data instead, which is commonly described as data collected by another entity. The practice of data collection is problematic because access to and availability of data might be limited for new market entrants or smaller firms.[38] This is the case if an established firm or entity is not willing to share its data with its competitors.

In certain areas of the digital economy, the established companies have such a large base of users and of data that no third party would be able to match a similar volume and assortment of data. This may especially – though not only – be the case with certain online services: for example, search engines or social networks, where "free" appealing services are offered to a large user base, thus producing a huge amount of information that may not be available to competitors.[39]

The existence of entry barriers must be evaluated on a case-by-case basis. Entry barriers do play a role when either the level of market concentration is relatively high, or the market is highly transparent and therefore exposed to tacit collusion. It is assumed that in such cases consumers do not benefit from productivity gains generally associated with the digital economy; instead, they are harmed. The German Federal Cartel Office highlighted that in market sectors where the collection and use of data play a vital role, such as search engines or social networks, a high level of market concentration can be observed.[40]

3. Denying access to data

Refusal to allow access to data is regarded as an anticompetitive lead if the data is of fundamental importance to the company requesting access. In a limited set number of cases, the European Court of Justice (ECJ) has ruled that a dominant company is obliged to concede admittance to its infrastructure. The ECJ has clarified that even a dominant company is not basically obliged to propel its rival's business. In the cases *Bronner,*[41] *IMS Health*[42] and *Microsoft,*[43] the ECJ showed that an organization can request admittance to the facility of a rival's business if the access is essential to a product or service which is mandatory for the company to survive on the market.

[36] European Commission (2009). Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, (2009/C 45/02).

[37] European Commission (2019). *Competition Policy for the Digital Era*. Final report: 110; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 12.

[38] Rubinfeld D and Gal M (2017). Access barriers to big data. *Arizona Law Review* 339. (59)2: 350–351.

[39] Tucker D and Wellford H (2014). Big mistakes regarding big data. *The Antitrust Source 1(*14)2: 7–8.

[40] Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 9.

[41] ECJ (1998). *Bronner* C-7/97, judgement of 26,11,1998, n 44-45.

[42] ECJ (2004). *IMS Health.* C-418/01, judgment of 29.04.2004, n 37.

[43] GC (2007). *Microsoft.* T-201/04, judgement of 17.09.2007, n 320–336.

Further, the refusal should forestall the advancement of another product or service for which a potential demand exists (this measure is appropriate when the activity of a licensed innovation is in question). Ultimately it is required that the refusal is not justified by objective considerations and that it is likely that the refusal excludes all competition in the secondary market.[44] The ECJ clarified that a product or service is essential only if there are no alternative products or services. Further, technical, legal or economic hurdles must exist, which "make it impossible or unreasonably difficult for companies seeking to operate in the downstream market to develop, possibly in cooperation with other undertakings",[45] products or services.[46]

These requirements would possibly be met if the organization mentioning access demonstrates that the information is truly extraordinary, and that there is no probability of getting the fundamental information to build up its own database. Greater information access may, in similar vein, dampen the motivation of contenders to develop their own source of data.[47]

a. Discriminatory access to data

Another kind of exclusionary conduct that is detrimental to competition is discriminatory access to data. Discriminatory access to data occurs when an incumbent company refuses to share its dataset with a specific company, but is willing to sell the data-set to other companies. According to the European competition law, this type of conduct could fall under Article 102(c) TFEU. The provision precludes abuses where firms apply dissimilar conditions to equivalent transactions with other business parties, thereby placing them at a competitive disadvantage.[48] The case against the company Cegedim can be considered as an example of such a violation.[49] The French Supreme Court stated that: "…the refusal to grant a licence for the use of its medical information database OneKey to those pharmaceutical companies using or intending to use Euris' customer relationship management (CRM) software constituted a discriminatory abuse of a dominant position".[50]

In this specific situation, vertical integration can allow unfair access to key information, leading to a distortion of competition. For instance, some commercial centre administrators, which additionally function as online retailers, approach information about their opponents selling in a similar commercial centre as well as customer conduct. This permits the administrator to recognize the scope of items that are exceptionally popular. An incorporated stage could then utilize this information for its potential benefit in settling on essential choices about which items and services to offer and at what costs. Hypothetically, a comparative impact could be accomplished by a vertically incorporated stage if the data that competitors working on a similar stage acquire are limited in relation to the commercial exchanges they are associated with. [51]

4. Exclusive contracts

Exclusive agreements are not a new concept in competition law.[52] However, they seem to be being implemented in new ways to exclude businesses in the digital economy. In terms of these agreements, incumbent companies do not try to directly restrict access to data; rather, they try to safeguard their data-related competitive advantage by gathering large volumes of data through exclusive agreements with third-party providers, or by foreclosing opportunities for competitors to procure similar data by making it harder for consumers to implement the rivals' technologies or platforms.[53]

44 ECJ (2004). *IMS Health.* C-418/01, judgment of 29.04.2004, n 37.

45 ECJ (1998). *Bronner.* C-7/97, judgement of 26.11.1998, n 44–45.

46 ECJ (1998). *Bronner.* C-7/97, judgement of 26.11.1998, n 44–45.

47 Geradin D and Kuschewsky M (2013). Competition law and personal data: Preliminary thoughts on a complex issue: 15; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 18.

48 TFEU article 102.

49 French Competition Authority (2014). Decision n 14-D-06, du 8 juillet 2014, relative à des pratiques mises en œuvre par la société Cegedim dans le secteur des bases de données d'informations médicales.

50 French Supreme Court (2017). Case No 926 F-D, 21 June 2017. Available at https://uk.practicallaw.thomsonreuters.com/w-009-5612?transitionType=Default&contextData=(sc.Default)&firstPage=true.

51 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 19.

52 Federal Trade Commission. Available at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/single-firm-conduct/exclusive-supply-or; See also *Mylan Laboratories v. State of Connecticut* (1999).

53 Grunes AP and Stucke ME (2015). No mistake about it: The important role of antitrust in the era of big data. University of Tennessee Legal Studies Research Paper No. 269: 3.

Exclusive agreements can exclude rivals from accessing data, in particular when the agreements are concluded by dominant companies. They can even be thought of as a network of exclusive agreements. It could be considered that in this case, such conduct might not only be covered by Art. 102 TFEU but also by Art. 101 TFEU.

The European Commission's *Google Search* (AdSense) case can be used as an illustration of exclusive agreements in the digital economy. In 2019, Google was fined € 1,49 bn for abusing its dominant position by artificially restricting the possibility of third-party websites to display search advertisements from its competitors. Google has protected its dominant position in the market for online search advertising by concluding exclusive agreements with third parties which were required not to source search ads from Google's rivals. Further, Google allegedly required third parties to take a minimum number of search ads from Google, to reserve the most prominent space on their search results pages to Google search ads, and to refrain from placing competing search ads above or next to Google search ads. Lastly, Google purportedly required third parties to obtain Google's approval before making any changes to the display of competing search ads. By doing so, Google prevented existing and potential competitors from entering the market, reduced choice in an artificial way, and stifled innovation.[54]

a. Tied sales and cross-usage of datasets

Undertakings that have market power in one market may attempt to leverage this market power to another related market. This type of behaviour is often described by the terms "bundling" and "tying", whereby an undertaking ties or bundles a good or service sold in one market with a good or service sold in a related market. An example could be a company that has valuable data and wants to enter the market of data analysis. If the company has market power, competition concerns would be raised if the company would only provide the data to a buyer if the buyer also bought the analysis software.[55]

The French Competition Authority stressed that the cross-usage of data – for instance the use of information gathered on a specific market onto another market – can, under specific conditions, have foreclosing effects.[56] Specifically, previous monopolists have favoured access to information, due to their public service activities. Companies with privileged access to data can use these data to make tailored offers to potential consumers in adjacent markets. In return, the company might gain a strong competitive advantage that could not be matched by rival suppliers.[57]

5. Price discrimination

By gathering large amounts of information, a company receives better information about the purchasing habits of their consumers and is in a much better position to evaluate their willingness to pay for a given good or service. Under the prerequisite that the undertaking has market power, the firm would then be able to use that data to set different rates for various consumer groups.[58]

Economic analysis indicates that the effects of price discrimination are somewhat ambiguous.[59] A few customers might end up paying higher prices for certain goods and services, whereas others get better price offers than they would in the absence of price discrimination. The last group of costumers can include some consumers that could not afford to buy the merchandise if a uniform price were set. Hence, price discrimination can actually increase social welfare. Apart from this, data-based cost discrimination can also reinforce competition. For instance, as a result of price discrimination, an enterprise can indicate lower costs to those customers having a strong preference for a different product, resulting in greater price competition.[60] The European Union, in any case, seems to view price discrimination in digital markets with suspicion.

54 See European Commission, press release (March 2019). Antitrust: Commission fines Google €1.49 billion for abusive practices in online advertising.

55 Competition and Markets Authority (2015). *The Commercial Use of Consumer Data*: 90.

56 French Competition Authority. Opinion 10-A-13 on the cross-usage of customer databases

57 French Competition Authority. Decision 14-MC-02 of 09.09.2014; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data*: 20.

58 Newman n (2014). The costs of lost privacy: Consumer harm and rising economic inequality in the age of Google. *William Mitchell Law Review* 40(865–873): 850.

59 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 21.

60 Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 21.

This can be concluded from the implementation of regulation (EU) 2018/302. The aim was to end unjustified discrimination in online purchases based on nationality, place of residence or place of establishment within the internal market. The ban on geo-blocking is considered to be an important step towards a digital single market strategy.[61]

E. Mergers and competitiveness

To improve access to data, a corporate strategy might consist of acquiring other companies owning large datasets or merging with them. Therefore, it is not surprising that the largest digital firms have engaged in mergers and acquisitions over the last decade.[62] What is problematic in this context is that, at the time they had been notified and reviewed, most mergers did not raise concerns for competition authorities. [63]

However, two main concerns regarding mergers and acquisitions in the digital economy have emerged during the last few years. The first concern is whether and when the acquisition of firms owning unique data resources can significantly hamper competition by creating horizontal, vertical or conglomerate effects.[64] Despite these concerns, it is recognized that mergers in the digital economy may lead to procompetitive effects. They frequently allow for new services, thanks to access to valuable sets of data. Hence, acquisitions or mergers that yield efficiencies – provided that the applicable merger procedure accepts an efficiency defence – must be considered by the competition authorities. In certain merger cases, the parties used the scale of data caused by the transaction as an efficiency defence.[65]

What is problematic is that mergers in the digital economy could lead to a concentration of control over valuable and non-replicable data resources.[66] This could limit the access to data for competitors. Further, mergers could result in a combination of different data troves, which in return might allow the acquiring entity to leverage market power.[67] Therefore, mergers and acquisitions in the digital economy regularly raise market foreclosure concerns.[68] A problem in this context is that the digital economy is very young and therefore experience is limited. This is made even more difficult by the Covid-19 pandemic, because due to market distortions and the associated increased need for restructuring, the previous findings do not provide an adequate yardstick for the assessment of the post-merger effects.[69]

Critically, it should be noted that competition law is based on the concept of market power and markets are usually presupposed to be money markets where customers invest fiat money to purchase products and services. Consumer welfare is mainly measured in terms of high costs, lower output, or alternative money-related metrics. This methodology has a debatable blind spot once the businesses in question give off goods for free. Blind spots in merger notification rules are especially verifiable within the digital economy sector due to the dynamism in which

61 Derived from: https://eur-lex.europa.eu/content/news/geo-blocking-regulation-enters-into-force.html?locale=de, 05.01.2020; Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC.

62 See OECD (2015). *Data-driven Innovation: Big Data for Growth and Well-being.* Paris; European Commission (2019). *Competition Policy for the digital era*, Final report: 110-125.

63 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 110.

64 For a general discussion see, inter alia, Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 16–17; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111.

65 European Commission (2010). Microsoft/Yahoo! Comp/M. 5727,18.02.2010, n184; European Commission (2008). Tomtom/Teleatlas. Comp/M. 4854, 14.05.2008, n 238–250; European Commission (2019). European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111.

66 Digital Competition Expert Panel (2019). *Unlocking Digital Competition.* Final report: 84–118; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 16.

67 Digital Competition Expert Panel (2019). *Unlocking Digital Competition.* Final report: 84–118; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 16.

68 Digital Competition Expert Panel (2019). *Unlocking Digital Competition.* Final report: 84–118; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111; Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data:* 16; DOJ Antitrust Division (2014). Competitive Impact Statement, 13-cv-00133 WHO, 08.05.2014: 5.

69 Powell M on merger control in times of crisis (2020). Available at https://youtu.be/KbJfgpZapTc (accessed 12 August 2020).

new market niches appear and start-ups have a fertile field for growth and are frequently acquired by larger companies before they reach a high turnover. In this context, it must be mentioned that some of the recent mergers in the digital economy have raised a debate on how to deal with the acquisition of small, but successful start-ups with a rapidly growing user base and significant competitive potential for dominant platforms. [70]

The European Commission acknowledges the fact that in the digital economy mergers between established companies and start-ups may create substantial synergies.[71] Problems could arise if the acquisitions lead to the strengthening of a company's market power, thus hampering effective competition. This is the case if the merger results in the elimination of a potential rival or the creation of market entry barriers. This is all the more problematic if there is a systematic pattern of such acquisitions by dominant platforms.[72] As the digital economy grows, the non-price effects of mergers are likely to become even more important. Under European Union merger control, the non-price effects of mergers are treated in the same way as price effects.[73]

In this context it is worth referring to Austria and Germany. Both countries have traditionally relied on turnover thresholds and have recently introduced transaction value-based notification thresholds.[74] The new regulations on transaction value thresholds serve to adapt competition law to the structural changes triggered by technological developments and global competition. The objective is to close the gap in their merger control regime.[75] Transaction value-based notification thresholds have been implemented. The aim of these thresholds is to cover those cases in which the previous turnover and company purchase price disproportionately differ. In such takeover cases, the high purchase price is often a sign of innovative business ideas with high competitive market potential.

The new threshold allows merger control to apply to the acquisitions of start-up companies with innovative business models and which have a low turnover at the time of the merger but which have the potential to assume an important position in the market in the future.[76]

F. Are legislative changes necessary?

The question of whether markets can self-correct is crucial for competition policy. The answer influences the range of illegality of certain types of conduct and the eagerness with which competition agencies intervene.[77] The findings of most of the recently published reports on the topic of big data and competition imply that self-correction in markets controlled by large digital firms is unlikely. In particular, the exercise of market power by large digital companies supposedly harms economic welfare and consumers.[78]

a. Excursus: Germany and the case for a digital regulatory framework

In Germany, the 10th amendment to the German Competition Act as the "Act Amending the Act against Restraints of Competition for a focused, proactive and digital competition law 4.0 and amending other competition law provisions" (GWB Digitalisation Act), entered into force on the 19th January 2021.[79] The aim of the amendment is to create a "digital regulatory framework", to address at least some of the problems mentioned above.

70 Rubinfeld D and Gal M (2017). Access barriers to big data. *Arizona Law Review* 339. (59)2: 350–351.

71 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 111.

72 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 116.

73 OECD (2018). Non-price effects of mergers: Summaries of contributions: 11.

74 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 115.

75 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 115.

76 On both, see Bundeskartellamt/Bundeswettbewerbsbehörde, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG, July 2018); European Commission (2019). *Competition Policy for the Digital Era*. Final report: 115; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 116.

77 Stigler Committee on Digital Platforms (2019). Final report: 81.

78 Stigler Committee on Digital Platforms (2019). Final report: 80–115; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 125 – 127; Competition and Markets Authority (2015). *The Commercial Use of Consumer Data*: 84 – 130; Australian Competition & Consumer Commission (2019). *Digital Platforms Inquiry*; UNCTAD (2019) *Digital Economy Report 2019*: *Value Creation and Capture: Implications for Developing Countries*. United Nations publication. New York and Geneva.

79 https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/19_01_2021_GWB Novelle.html?nn=3591568.

The core provision is the newly introduced § 19a GWB. It provides for additional possibilities for the Bundeskartellamt. As a result, the Bundeskartellamt can now prohibit certain types of behaviour of large digital companies. Prohibited conduct might include self-preferencing of a firm`s own services or products, or impeding competition by hindering new competitors to enter the market by refusing them access to required data.[80]

The prerequisite for intervention is that the company in question is of formidable importance for competition across different markets. This is the case when a company has a unique strategic position and substantial resources. First and foremost, this should address problems arising from the actions of digital giants like Google, Amazon, Facebook and Apple.[81]

b. *Responses in the European Union and the United States*

At the level of the European Union, particular reference should be made to the European digitization strategy. The strategy includes two draft regulations, namely the Digital Markets Act (DMA)[82] and the Digital Services Act (DSA)[83]. The aim of both legislative proposals is to prevent the emergence of further monopolies ("gate-keepers") on the digital markets.[84] Gatekeepers are defined as digital platform-companies having a strong economic position and a significant impact on the internal market. Further, gatekeepers are active in multiple European Union countries.[85]

The two draft regulations provide for severe fines in the event of violations. In the case of a violation (i) of the DSA, fines of up to six per cent of the global turnover of the previous year are threatened; (ii) in the case of a violation of the DMA, a fine of up to ten per cent of the global turnover of the previous year can be imposed. In the case of multiple violations, unbundling of gatekeeper companies is possible as *ultima ratio*. The responsibility for enforcing the DSA is to be carried out by means of national "supervisors". The selection of these supervisors is the responsibility of the individual member states. The European Union Commission is responsible for the enforcement of the DMA.[86]

In the United States, digitalization and big data have prompted a debate around whether the consumer welfare standard (which has guided the interpretation of the Sherman Act since the 1970s) should be rethought as a matter of guiding principle in the area of big data and digitalization.[87] In the European Union, the situation is a bit different as the ECJ in regard to Article 102 TFEU has ruled that "not only at practices which may cause damage to consumers directly, but also at those which are detrimental to them through their impact on an effective competition structure."[88] In a fast-changing market environment, where prices are no longer the determining factor, the consumer welfare standard must be applied differently when assessing a competition case. New approaches are required regarding theories of harm based on an increasing theoretical understanding of digital markets and empirical evidence.[89]

80 https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/19_01_2021_GWB Novelle.html?nn=3591568.

81 https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/19_01_2021_GWB Novelle.html?nn=3591568.

82 European Commission. Proposal for a regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act).

83 European Commission. Proposal for a regulation of the European Parliament and of the Council on a single market for digital services (Digital Services Act) and amending Directive 2000/31/EC.

84 See for the whole: European Commission. Proposal for a regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act); European Commission. Proposal for a regulation of the European Parliament and of the Council on a single market for digital services (Digital Services Act) and amending Directive 2000/31/EC.

85 See https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en .

86 See for the whole: European Commission. Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act); European Commission. Proposal for a regulation of the European Parliament and of the Council on a single market for digital services (Digital Services Act) and amending Directive 2000/31/EC.

87 European Commission (2019). *Competition Policy for the Digital Era*. Final report: 42.

88 See, inter alia Case T-286/09, Intel v Commission, EU:T:2014:547, at para. 105; Case C-209/10, Post Danmark I, EU:C:2012:172, at para. 20; Case C-280/08 P, Deutsche Telekom v Commission, EU:C:2010:603, at para. 182; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 40.

89 See also: Laitenberger J (2018). Pleading for a more empirically driven approach. CRA conference. 5 December 2018; Commission (2019). *Competition policy for the digital era*, Final report: 40.

In both the United States and Europe, the common standard for defining markets is the hypothetical monopolist test, which is also called the small but significant non-transitory increase in price (SSNIP) test.[90] The aim of a market definition is to gauge a firm's ability to exercise market power. As in most cases in the digital economy, services are provided at zero-price for consumers, the application of the SSNIP test does not lead to satisfactory results.[91] Hence, new metrics regarding the measurement of market power need to be established.

Different authorities have different powers and resources. Legislative changes leading to a harmonization of the different procedural laws could facilitate the collaboration between authorities within the same jurisdiction. This would ease investigations or the adopting of remedies against companies in the digital area. A harmonization would have the advantage that the competencies and resources of individual authorities could be pooled, and investigations and procedures would therefore be much faster and more effective.

Most digital companies have a cross-border nature and global scope. Hence, most of the competition agencies around the globe are facing the same problems when dealing with big data and digital platforms. Moreover, since most competition frameworks are designed for traditional markets and may not be suitable for the digital economy, as described above, increased cooperation between competition authorities might mitigate the risks commonly associated with big data regulation.[92]

G. Conclusion

Digitalization is substantially changing our economies, societies, access to information and ways of life. Digital transformation has been accelerated by the Covid-19 pandemic and it is unlikely that this will slow down. Digitalization has generated wide-ranging technological innovation, and multiple new products and new services. Nevertheless, digitalization raises concerns because of its ubiquity and its political and societal impacts. In particular, there is a justified fear that digitalization could lead to a concentration of power in only a handful of very large global corporations.

Legislators and authorities are therefore increasingly called upon to find answers to the most urgent legal questions in connection with the digital economy. Merger control is therefore of essential importance. It is important to ensure that companies that already have market power do not expand their market by taking over innovative and promising start-ups (in order to gain better access to data) which might jeopardize effective competition. Against this background, the newly value-based notification thresholds introduced in Germany and Austria might be a first step to address those new challenges.

Where the fear is expressed that big data will increase market transparency and that the use of algorithms will facilitate collusive conducts, it should be noted that most competition regimes currently provide enough safeguards to prevent such behaviour. This is particularly so as self-learning algorithms do not really exist yet. Moreover, although there are risks in under-regulation, there is also the chance that over-regulation could prevent innovation at an early stage.

The use of competition law as a sword to combat big data carries the risk of undermining competition and innovation. Competition authorities are well advised to be cautious in areas of rapid innovation to avoid hindering competition and to allow the market to develop naturally. While an industry is in its early stages, it can be difficult to distinguish between pro-competitive innovation and changes that aim (or result) in restricting competition.

Nevertheless, it will be imperative to steadily adapt competition law and competition economic models in such a way that they can take into account the risks associated with digitalization. In particular, the consumer welfare standard, which has shaped the decisions of competition authorities for decades, could play a lesser role in the future because in digital markets products and services are provided to customers for free.

90 Sokol D and Comerford R (2016). Antitrust and regulating big data. *23 Geo, Mason L. Rev:* 1129.

91 Facebook/WhatsApp; Commission decision of 4 September 2012 in Case M.6314.

92 Stigler Committee on Digital Platforms (2019). Final report: 80 – 115; European Commission (2019). *Competition Policy for the Digital Era*. Final report: 125 – 127; Competition and Markets Authority (2015). *The Commercial Use of Consumer Data*: 84 – 130; Australian Competition & Consumer Commission (2019). *Digital Platforms Inquiry*; UNCTAD (2019) *Digital Economy Report 2019*: *Value Creation and Capture: Implications for Developing Countries*. United Nations publication. New York and Geneva; BRICS Report (2019). *Digital Era: A Brics view*: 364.

CHAPTER II: CONSUMER LAW ENFORCEMENT AS A TOOL TO BOLSTER COMPETITION IN DIGITAL MARKETS: A CASE STUDY ON PERSONALIZED PRICING

Dr. Christine Riefa

A. Introduction

Consumer law and competition law have evolved as distinct legal disciplines[1], where competition law is traditionally seen as a superior vehicle for the protection of consumers.[2] This enforcement model has important shortcomings, many of which were being felt even more acutely during the Covid-19 pandemic. With people's everyday activities increasingly shifting online, it became abundantly clear that consumer and competition enforcement authorities were unable to adequately protect consumers against price gouging, the refusal to reimburse for services not received due to lockdowns, and many other unfair commercial practices that developed to the detriment of consumers. The profile of consumers affected by those practices also revealed that vulnerability in times of pandemic was the plight of all and not the reserve of a few on lower incomes or the less educated portion of our societies.[3]

The dominance of competition law is rooted in history, in part because much of what has evolved to be classed as consumer law first developed under the guise of unfair competition.[4] It is also because competition enforcement is more centred on public enforcement and is thus wider-ranging than consumer law, which tends to be focused on private actions (placing the burden of enforcement on consumers even in collective actions). Consumer law has also preferred the use of information to assist consumers, rather than more substantial obligations for businesses or the active monitoring of markets by enforcers, which has somewhat downplayed its importance. In addition, competition law enforcement is also generally better resourced, creating a somewhat virtuous circle and reinforcing its position as the regulatory instrument of choice.

Competition and consumer law both evolved with neo-classical economics as a guide, justifying that state intervention is allowed but ought to be restricted to only the worst abuses, because markets are trusted to self-regulate.[5]

> "Indeed, within the model of 'perfect competition', economic agents do not make mistakes or commit errors of any kind. Sellers are homogenous. Transaction and information costs, including the costs of processing information required to make economic decisions, are zero. It follows that resources instantaneously flow to their highest valued use."[6]

1 Cseres KJ (2005) *Competition Law and Consumer Protection.* Kluwer Law International. 1.

2 This is despite the fact that under the Treaty on the Functioning of the European Union (TFEU), consumer protection has its own article (Art 169) that seeks to promote consumers' interests. This is an article in its own right, not a sub-objective of the provision on competition.

3 Riefa C (2020). Coronavirus as a catalyst to transform consumer policy and enforcement. *Journal of Consumer Policy* (43). Available at https://doi.org/10.1007/s10603-020-09462-0> (accessed 16 July 2020). See also Goyens M, Reyna A (2020). Public interest in EU policymaking after Covid-19: Five short-term lessons from a consumer perspective. *Journal of Antitrust Enforcement.* 8(2): 280–282. (Special issue on competition law in times of crisis – tackling the Covid-19 challenge.) Available at <https://academic.oup.com/antitrust/issue/8/2 (accessed 16 July 2020).

4 For more on the relationship between consumer and competition law and policy, see Cseres KJ (2005). *Competition Law and Consumer Protection.* Kluwer Law International. 1.

5 Riefa C and Gamper H (2021). Economic theory and consumer vulnerability: Exploring an uneasy relationship. In Riefa C and Saintier S (eds) *Vulnerable Consumers and the Law – Consumer Protection and Access to Justice.* Routledge: 17–18.

6 Wright JD and Ginsburg DH (2015). Behavioral law and economics: Origins, fatal flaws, and implications for liberty. *106 Northwestern University Law Review* 1033.

As a result, competition and market forces are often billed as the best protections for consumers' interest.[7] Yet, competition alone is not sufficient.[8] This chapter argues for an augmented place made for consumer law enforcement to benefit competition and to help tackle the challenges of the digital marketplace. It does so notably by taking online price personalization as an example of a practice where consumer enforcement can provide valuable results, and demonstrates how this would be so.

In the digital era and post Covid-19, moving towards a more equitable relationship between consumer law and competition law will yield better results. The focus should be on looking at the two, no longer as a pair of distant relatives, with one being subservient[9] to the other, but rather conceptualizing them as equal parts of a modern and robust enforcement policy. The chapter reflects on making a change in enforcement patterns in the United Kingdom, which is used as the jurisdiction of reference. The "re-balancing" of the relationship between consumer and competition law will no doubt also be possible, and indeed necessary, in other parts of the world.

Developing a more equal footing for consumer law will allow resources to be

> "best allocated to the enforcement authority most able to protect consumers and repair the harm caused. This is especially important in those cases where prompt intervention under consumer law can prevent the issue from deteriorating to the point where not even competition enforcement would suffice to restore a fair market outcome. In turn, more reliable consumer enforcement ought to help develop a general duty to trade fairly, shaping markets for the future and lessening the need for competition enforcement, that is, thanks to the fact that the presence of more confident and assertive consumers empowers competition on the merits."[10]

This is important because much of the most recent literature acknowledges that the way competition laws are currently being enforced is far from optimal and there are notable gap cases, where behaviours remain unchecked.[11]

The digital era forces us to "rethink" the way in which those disciplines have worked on the ground and are likely to work in the future.[12] There have been recent efforts by competition, data protection and consumer protection agencies to tackle the excesses of the use of consumer data. But no solution that addresses the widely felt underlying concerns relating to the transparency of, the control over, and the accountability for the use of personal data by key players in digital markets has been forthcoming.[13] Even the European Union proposals for a Digital Services Act and Digital Markets Act[14] and the equivalent projects in the United Kingdom may prove to be insufficient; or at least, they will not take hold for some time. This quasi-paralysis of the legal system in tackling digital developments points to the need to explore alternative tools that can be used today.

This chapter starts with reviewing the efforts made to modernize the competition framework to address the challenges of digital markets in the United Kingdom, efforts that are now reflected in many other jurisdictions (sections B and C). It then moves on, in section D, to an exploration of a broader enforcement mix beyond competition law, advocating for an economic approach to the enforcement of consumer law as an effective tool for plugging the current and future gaps. The chapter

7 Ramsay I (2012). *Consumer Law and Policy – Text and materials on regulating consumer markets.* 3rd ed. Hart Publishing, Oxford: 3. For a recent example, see CMA (2019). *Digital Markets Strategy*: 6. Also see Directive 2005/29/EC on unfair commercial practices (UCPD) and Recital 4 of the Consumer Rights Directive 2011/83/EC (CRD).

8 Cseres KJ (2005) *Competition Law and Consumer Protection.* Kluwer Law International: 328.

9 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 7.

10 Ibid: 9.

11 Ibid: 56-77; See also Tyrie A (2019). Letter from Andrew Tyrie to the Secretary of State BEIS' (21 February 2019).

12 In consumer law, see for example, Howells G, Twigg-Flesner C and Wilhelmsson T (2017). *Rethinking EU Consumer Law.* Abingdon, Routledge; Willett C (2018). Re-theorising consumer law. *Consumer Law Journal* 179; In competition law, see Classen R and Gerbrandy A (2016). Rethinking European competition law: From a consumer welfare to a capability approach. *Utrecht Law Review*: 112; Stiglitz JE (2017). Towards a broader view of competition policy. In Bonakele T, Fox E and Mncube L (eds) *Competition Policy for the New Era – Inside from the BRICS Countries.* Oxford University Press, Oxford.

13 Graef I, Clifford D and Valcke P (2018). Fairness and Enforcement: Bridging competition, data protection, and consumer law. *International Data Privacy Law.* 8(3): 200-223.

14 For more on the proposals see: <https://ec.europa.eu/digital-single-market/en/digital-services-act-package> (accessed 18 March 2021).

concludes by modelling the intervention in consumer digital markets using consumer law, concluding that applying consumer law to personalized pricing can significantly assist in improving competition.

B. Efforts to modernize the control of digital markets: the United Kingdom

While it is now clear that the digital economy can bring substantial benefits to consumers and businesses alike, it is an undeniable fact that the emergence of tech giants is altering the fabric of competition and exposing consumers to many risks of harm. In the United Kingdom, the Furman report highlighted the fact that competition needs a new approach alongside the conventional competition law tools of merger control and antitrust enforcement.[15] This was a need also acknowledged in the Competition and Markets Authority (CMA) Digital Market Strategy.[16] This is because the network-based and data-driven platforms business models – the foundation of the digital economy – tend to tip markets towards a single winner. Overall, where competition does exist in digital markets, this is frequently between a small subset of the five largest digital companies.[17]

The Furman report recommended several tools for the United Kingdom to tackle digital markets. This included the creation of a "pro-competition" digital market unit to secure competition, innovation and beneficial outcomes for consumers and businesses. It proposed that this unit use data mobility, data openness (with adequate privacy) and open standards as tools to secure greater competition, alongside the adoption of codes of practice to guide behaviour. This proposal was adopted by Government in its Budget for 2020[18], and the Digital Market Taskforce has now released its advice on how to move forward in the creation of the Digital Market Unit (DMU).[19]

Prior to the report of the Taskforce, the CMA Chairman (Andrew Tyrie at the time) wrote to the Secretary of State[20] asking for more powers to enforce laws adequately.[21] This included some reforms relating to the tools of competition law. From the perspective of consumer law enforcement, the Tyrie reform proposal also made a number of suggestions for bringing consumer law enforcement tools in line with competition law enforcement, with more administrative powers being granted to the CMA.[22]

Some important proposals for serving consumers were floated by Tyrie:

- Giving the CMA the power to impose fines rather than apply to court when a business does not comply with an information notice or when they do not comply with an undertaking;
- Using a turnover-based fines regime for non-compliance;[23]
- Introducing civil fines to sit alongside the threat of criminal prosecution when a firm provides false or misleading information; [24]
- Introducing a general information-gathering power to monitor developments in the digital economy, including the growth in the use and sophistication of algorithms; and enabling more comprehensive responses to "supercomplaints";[25]

15 Digital Competition Expert Panel (2019). *Unlocking Digital Competition.* Final report. 8. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> (accessed 18 March 2021).

16 CMA (2019). *Digital Markets Strategy*: 8.

17 Digital Competition Expert Panel (2019). *Unlocking Digital Competition.* Final report: 8. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf> (accessed 18 March 2021).

18 Budget 2020 (2020). Delivering on our promises to the British people. (HC 121) para 1.203: 56.

19 CMA (2020). *A new Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce (December 2020, CMA 135). Available at https://assets.publishing.service.gov.uk/media/5fce7567e90e07562f98286c/Digital_Taskforce_-_Advice.pdf > (accessed 18 March 2021).

20 Tyrie A (2019). Letter from Andrew Tyrie to the Secretary of State BEIS' (21 February 2019). Available at <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/781151/Letter_from_Andrew_Tyrie_to_the_Secretary_of_State_BEIS.pdf> (accessed 18 March 2021).

21 Ibid.

22 Ibid: 30.

23 Ibid.

24 Ibid: 31.

25 Ibid: 32.

– Creating a statutory duty to treat consumer interests as paramount, to be imposed on both the courts and the enforcer.[26]

The Tyrie proposals both in consumer and competition law were "intended to enable the CMA to intervene earlier and more robustly to tackle consumer detriment, and to penalise and deter wrongdoing when it occurs. Taken together, they would mark a decisive shift in favour of the consumer and of businesses that behave fairly and competitively, and against those businesses that, among other things, take advantage of consumer vulnerability".[27]

This is not a line the Digital Taskforce appears to have embraced wholeheartedly. While it acknowledges that many of these reforms will be key in ensuring existing laws are best able to address the challenges of the digital age, the focus is on market investigations and interoperability – primarily competition law tools.[28] There is no real discussion in the document of consumer law reforms, other than in passing. Yet the advice from the Taskforce confirms that the proposal for civil fines for breach of consumer law and giving direct decision-making powers to the CMA, and potentially other enforcement agencies, would be one of the reforms to take forward.[29] The Taskforce notes, however, that consumer law (singling out the Unfair Trading Regulations 2008) is not equipped to deal with concerns relating notably to "choice architectures", of which personalized pricing is one manifestation.

Instead of recommending precise amendments[30] to tool up consumer law enforcement and make the Unfair Trading Regulations fit for purpose (see part F in this chapter), the Taskforce prefers the creation of a regime that guides businesses through the ways in which they are expected to behave in enabling effective consumer choice.[31] The Taskforce also recommends the imposition of a more explicit duty on firms to take reasonable and proportionate steps to reflect consumers' interests in the design of their products, and a duty of care to enable more effective choices. Both measures presumably could trigger enforcement if they are not complied with. The Taskforce advice was followed by a consultation period, which has now ended. The more refined plan for reforms is eagerly awaited.

C. Enforcement mix ought to go beyond competition law

At this point, and irrespective of the preference already expressed in the United Kingdom, it is important to reflect on the chosen enforcement policy and the mix of enforcement methods necessary to adequately protect consumers and ensure that markets work well in the future.[32] A clear policy decision on how consumer and competition law (and to some extent data protection law) interact would assist, as it could guide the direction of budgets and the amount of attention that needs to be given to each toolkit.

Reflecting on the use of consumer data, Graef et al. (2018) call for more coherent enforcement and closer collaboration between different authorities, arguing that the issue is not a lack of substantive fairness, but rather a lack of enforcement.[33] Stronger public enforcement is indeed welcomed, although in the United Kingdom it departs somewhat from many years of the application of an enforcement policy that started during the Thatcher administration. It is not at all sure that Tyrie's suggestions for reform will therefore be fully taken on board and/or that successive governments will be willing to amend the underlying rationale for interventions based on neo-liberal economics. Indeed, The Green Paper on Modernising Consumer Markets, for example (although it predates the Tyrie letter and the Digital Taskforce advice) strongly illustrates this line, as it sets out three principles for responding to

26 Ibid: 5

27 Ibid: 7. Note that according to Calo, all consumers are potentially vulnerable to digital market manipulation (in Calo R (2014). Digital market manipulation. *82 George Washington Law Review 995.*

28 CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce: 69, para 5.10.

29 CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce: Appendix G, G17, box G.1.

30 Save for adding to the blacklist of practice certain manipulative practices, see CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice (n 19): 73, para 5.28.

31 CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce: Appendix G, G24.

32 In this respect taking a policy decision on how the disciplines ought to interact is important as it can guide where budgets are directed and what investments are being made.

33 Graef I, Clifford D and Valcke P (2018). Fairness and enforcement: Bridging competition, data protection, and consumer law. *International Data Privacy Law.* 8(3): 202.

the challenges and opportunities of modern consumer markets:[34]

- Competition should be central to the approach.
- Consumers should benefit from new technology and new business models with competition and regulation working together in the consumer interest.
- Consumers should be able to get redress when things go wrong and consumer rights should be effectively enforced.

Thus, the government, at least at the time the Green Paper was written, seemed to remain attached to the idea that consumers are able to vote with their feet (given the right tools) and are able to be the arbiter of markets through private redress mechanisms. The Green Paper did not really question the viability of this model. The strategic Steer to the CMA[35] seemed to give cause for optimism in that it recommended to the CMA that it champion consumers, indicating a possible move away from purely neo-liberal economics and the overreliance on competition regulation to protect consumers. The Steer made a number of recommendations: focusing on activities where the potential for harm is clear; tackling market failure; taking a multi-disciplinary approach in doing so, leading work with sectoral regulators to ensure consumers are protected from anticompetitive behaviours; making markets work well for vulnerable consumers; helping consumers get the most from the digital economy through building consumer trust and enforcing the law to protect consumers; and enforcing against unfair trading practices and contract terms.[36] The Steer was, however, only a very brief document (less than three pages) and designed to inform priorities for the CMA rather than set out a consumer policy strategy for the United Kingdom.[37]

The Taskforce advice, which is the more recent, seemed to give the nod to the idea by supporting some consumer law reforms. However, while it encourages collaboration across silos, the advice remains very much guided by competition needs. Few pages are devoted to consumer law efforts and hardly any details on these aspects are put forward. Besides, the Taskforce clearly recommends the creation of the DMU to "further the interests of consumers and citizens in digital markets, by promoting competition and innovation".[38] This is a clear reminder that the changes in consumer law are not about to trump the central role that competition will play, and they remain an accessory, not an equal partner.

D. Looking to embrace a more economic approach to consumer law enforcement

If more substantive changes to the law were not to happen, or if one accepts that reforms in competition law will likely take time and gap cases will continue to exist in the foreseeable future, how can consumers be adequately protected in digital markets in the short term?

Siciliani, Riefa and Gamper take a pragmatic approach to making consumer law enforcement an asset in achieving competitive markets.[39] The authors champion the use of an economic approach to consumer law enforcement and policymaking through the use of "consumer theories of harm". Economic models can be used to guide responses, help identify consumer detriment and best allocate resources.[40] The adoption of a more economic approach to consumer law enforcement (akin to the approach in competition law, through the application of theories of harm) would empower enforcers to act in areas where detriment to consumers derives from a lack of professional diligence. This is the case in four archetypal consumer theories of harm. These theories of harm cover the majority of the cases for intervention in the area of consumer protection based

34 Dept for Business, Energy and Industrial Strategy (BEIS) (2018). *Modernising Consumer Markets.* Consumer Green Paper (April 2018, Cmd 9595): 7.

35 Dept for Business, Energy and Industrial Strategy (BEIS) (2019). *The Government Strategic Steer to the Competition and Market Authority* (July 2019). Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/818676/cma-strategic-steer-responses.pdf (accessed 21 March 2021).

36 Dept for Business, Energy and Industrial Strategy (BEIS) (2019). *The Government Strategic Steer to the Competition and Market Authority* (July 2019).

37 There is, however, a commitment that Government will respond publicly to CMA recommendations within 90 days and a presumption that the Government will accept all of the CMA's published recommendations unless there are strong policy reasons not to do so.

38 CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce: Appendix G, G24.

39 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach To Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 9.

40 Ibid: 109–136.

on the mainstream economic theory of "bounded rationality".[41] They offer an alternative model to assess where and how consumer detriment may occur. When behaviours fall within one of the theories, enforcers, and potentially legislators, ought to intervene because consumers will experience detriment.

The consumer theories of harm analyse the market from both demand and supply sides, filling a gap in economic analysis by adopting a 360-degree approach to assess detriment. This is an important feature, as competition law, for example, tends to mostly concern itself with supply,[42] whereas consumer law is more focused on demand. The consumer theories of harm include the "scam", "lemon", "shock" and "subsidy"[43] – names given for ease of reference rather than an exact description of the economic configuration they may entail. Depending on the market setup, practices can drift from one theory to the other.

The "scam" theory of harm describes situations where naïve consumers are left at the mercy of unfair firms. They fail to perceive the risk that the product or service on offer may be worthless. In the scam, demand is entirely unwarranted and charlatans compete to deceive. Traditional examples include pyramid schemes, fake lotteries or prize draws, or fake medical claims. In these situations, maximal financial detriment is experienced by a category of mostly vulnerable consumers. Neither sophisticated consumers nor fair firms want to trade in these fake "markets". As they can avoid them, there is no incentive for unfair firms to improve the way they operate.

In the "lemon" theory of harm, consumers cannot really judge the quality of what is offered. This concerns mostly experience or credence goods. Sophisticated consumers and fair firms are likely to want to be active in the market, but the presence of naïve consumers and unfair firms might cause both of them to withdraw from the market. This withdrawal from the market is to the detriment of naïve consumers because there is a risk of an adverse selection spiral. Traditional examples include clocked cars, or repair services.

The "shock" theory of harm applies where naïve and sophisticated consumers are faced with the same widespread use of misleading practices, but sophisticated consumers are able to spot traders' attempts to deceive. This theory of harm applies mostly to search attributes (such as price or terms and conditions). The shock is felt by naïve consumers who did not detect the unfair practice. In those configurations, there should be incentives to de-bias the market (self-correction). Typical examples include reference pricing, drip-pricing, and restricted liability for faulty goods.

In the "subsidy" theory of harm there is a risk that naïve consumers are discriminated against by the generality of traders, with sophisticated consumers benefiting from the exploitation of naïve ones. The market might be stuck in a bad equilibrium. The lack of foresight or discipline on the naïve consumers' part means that unfair traders are able to charge high fees that sophisticated consumers can avoid, thereby being subsidized by vulnerable ones. This includes, for example, shrouded add-ons or penalty charges.

With these in mind, the role of digital platforms needs to be investigated for it can lead to a finding of poor standard of professional diligence (that can be sanctioned by consumer law). For example, when market players proceed with dubious data-collection practices to present consumers with targeted advertising or nudge their buying decisions, the market, left to its own device, quickly ends up in a downward spiral and forces a race to the bottom (akin to the "lemon"). To remain competitive, even "fair" businesses struggle to operate without using the same techniques. Exploitative practices become the default (which could lead to the market becoming a "scam"). Recent studies for example, have confirmed the alarming use of "dark patterns"[44] and damaging effects of choice architectures.[45] In addition, the high concentration in digital markets means that

41 Simon H (1955). A behavioural model of rational choice. *69 Quarterly Journal of Economics 99.*

42 Smith R and King S (2007). Does competition law adequately protect consumers? 28 *European Competition Law Review* 412: 420.

43 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach To Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 111.

44 Dark patterns describe underhand techniques to nudge consumers into options that are intrusive of privacy and are based on unethical and exploitative principles. See Mathur et al. (2019). Dark Patterns at Scale: Findings from a Crawl of 11k Shopping Website. Available at <https://arxiv.org/pdf/1907.07032.pdf> (accessed 21 March 2021).

45 CMA (2021). *Algorithms: How can they reduce competition and harm consumers?* Available at <https://www.gov.uk/government/publications/algorithms-how-they-can-reduce-competition-and-harm-consumers/algorithms-how-they-can-reduce-competition-and-harm-consumers#theories-of-harm> (accessed 19 March 2021).

there is often no meaningful alternative choice[46] and consumers willing to vote with their feet will be unable to do so. Besides, obtaining private redress after the event can be difficult and very few consumers, in the absence of adequate collective action mechanisms or effective dispute resolution mechanisms (courts or alternative dispute resolution (ADR)), pursue the matter. Those consumers who do use dispute resolution mechanisms in the United Kingdom are also primarily male, middle-aged, and middle-class with high levels of education[47], leaving without remedy a large chunk of consumers who are not sufficiently motivated or confident to seek redress. As a result, consumers cannot really force a change of behaviour on the supply side, no matter how diligent they may be. In other configurations, sophisticated consumers may be aware of ways to avoid data collection or disable privacy invasive features (the "subsidy") and thus benefit from naïve consumers who are not able to do so or are unaware. This, in turn, can damage the trust all consumers experience in markets. Consumers become disengaged because it is in fact the most rational thing to do. As a result, they no longer fulfil their role as regulators of markets.

E. Rationale for intervention in digital markets: a case study on personalized pricing

Personalized pricing builds on choice architecture and on data collection. Personalized pricing uses the information gathered about a consumer or a subset of consumers to offer a price that is different from that the consumer would have paid if they had picked up the product on a physical shelf. Personalized pricing[48] has the potential for loss of trust on the part of the consumer, but the market is clearly adapting to use less overt forms of price discrimination. Personalized prices or derivative techniques[49] can lead to consumer harm because they can give rise to exploitative effects. Through the use of algorithms, personalized pricing enables a firm to model consumers' willingness to pay on a large scale and, as a result, potentially extract a higher price than it would otherwise have, or entice buying where it would have missed out on a sale.[50]

This practice is likely to fall in the category of the "shock" theory of harm, according to the classification developed by Siciliani, Riefa and Gamper, and suggests that intervention in the market ought to be forthcoming to avoid consumer detriment.[51] Where the pricing is based on heterogeneous search costs (the so-called Diamond paradox[52]) competition law does not apply (since there is no demonstrable collusion) and yet consumer detriment is sustained.[53] Further, personalized pricing can also act as a price obfuscation technique[54], unreasonably raising consumers' search costs and yet also potentially escaping the application of competition law. In this way, the price personalization can lead to "confusopoly", where rival firms avoid competition by confusing consumers through the use of multiple and complex tariffs[55] as is the case in utilities, telecoms, and financial services (most notably

[46] Note, however, that privacy-friendly rivals are starting to emerge, but to date their reach remains quite limited. See for example in the search engine market, Duckduckgo.com and Quant.com.

[47] BEIS (2018). *Resolving Consumer Disputes: Alternative Dispute Resolution and the Court System.* Final report. Available at <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/698442/Final_report_-_Resolving_consumer_disputes.pdf> (accessed 21 March 2021).

[48] CMA (2018). *Pricing Algorithms*. Economic working paper on the use of algorithms to facilitate collusion and personalized pricing. CMA: 94; Wild M and Thorne M (2018). A price of one's own: An investigation into personalised pricing in essential markets. Citizens Advice; See also European Commission (2018). *Consumer Marker Study on Online Market Segmentation through Personalised Pricing/ Offers in the European Union.* Available at <https://ec.europa.eu/info/publications/consumer-market-study-online-market-segmentation-through-personalised-pricing-offers-european-union_en> (accessed 19 March 2021).

[49] This includes for example, personalized advertised prices. Citizens Advice (2018). A price of one's own: An investigation into personalised pricing in essential markets.

[50] See OFT (2013). *Personalised Pricing, Improving Transparency to Improve Trust.* OFT1489; CMA (2018). *Pricing Algorithms*. Economic working paper on the use of algorithms to facilitate collusion and personalized pricing. CMA: para 7.32.

[51] See also on rationale for intervention, Bar-Gill O (2019). Algorithmic price discrimination: When demand is a function of both preferences and (mis)perceptions. *2 University of Chicago Law Review* 217: 86.

[52] The Diamond paradox describes the fact that firms set monopolistic prices if consumers face search costs. The diamond paradox is named after Peter A. Diamond who developed this idea in his article: A model of price adjustment. 3 (1971) *Journal of Economic Theory* 156.

[53] Siciliani P (2019). Tackling anticompetitive parallel conduct under personalized pricing. 42 *World Competition* 377–390: 378.

[54] Ibid: 386.

[55] Siciliani P (2014). Confusopoly and the fallacies of behaviouralism: A response to Littlechild and Hviid & Waddams Price. 10 *European Competition Journal* 419.

insurance). Interestingly, tariff proliferation grew in parallel to the popularity of the Internet as a platform for shopping around,[56] possibly as a means to ensure that consumers could not capitalize on the reduction in search costs price comparison tools were going to bring.

Turning to consumer law as a means of regulation in this area could help. One strategy may be to require businesses to disclose (information duty) that they are using personalized pricing, in the hope that consumers would want to shop around. This is the solution that the Omnibus Directive 2019/2161[57] in the European Union settled on, amending Directive 2011/83/EU on Consumer Rights. It adds in Article 6(1)(ea) on information requirements for distance and off-premises contracts: "where applicable, that the price was personalized on the basis of automated decision-making". It is also a solution that the CMA in the United Kingdom acknowledged would lead to personalization being less harmful to consumers who can exercise effective choice. However, the CMA considers that transparency is not sufficient.[58] In any event, post-Brexit, the United Kingdom has not implemented the Omnibus directive and thus no such obligation will exist. Besides, there is also broad consensus that mandatory disclosure has by and large failed, or is not as effective as it ought to be.[59] Even when it is rationalized, through the application of behavioural economics, thus taking into account consumers' imperfect decision-making abilities, it remains an imperfect proxy for consumer protection because "the risk is that consumers who are not able to make any sense of the information, even after it has been calibrated to take into account human nature, will be stigmatised and penalised".[60]

Besides, in this situation, search costs for consumers would remain high and obfuscation is likely to continue, especially if, in order to compete, even fair businesses need to adopt similar techniques. In addition, the information paradigm in the United Kingdom (and the European Union), largely rests on the use of an "average consumer" as a main reference point for protection. It is the benchmark used to determine the expected behaviour of consumers.[61] The average consumer is a hypothetical consumer who is "reasonably well-informed, reasonably observant and circumspect"[62] and who mostly corresponds to the "homo economicus" used by neo-liberal rational choice theory. The expectations on consumers are placed rather high – too high for many, since there is a mismatch between the standard adopted and the ability of the "real" average consumer.[63] Greater levels of intervention are therefore required that go beyond disclosure requirements and move towards the pursuit of a standard of substantive fairness.

Another route to tackling personalized pricing in the United Kingdom could be to use ex ante competition law tools such as a market investigation.[64] Market

56 Siciliani P (2019). Tackling anticompetitive parallel conduct under personalized pricing. 42 *World Competition*: 387.

57 EU Directive 2019/2161 on better enforcement and modernization of Union consumer protection rules, Article 4(4)(a)(ii) and Recital 45. For more on the way the European Union regulates personalized pricing, see Esposito F (2020). Making personalised prices pro-competitive and pro-consumers. *Cahiers du CeDIE* 2020/02. Available at <https://uclouvain.be/fr/instituts-recherche/juri/cedie/cahiers-du-cedie.html> (accessed 21 March 2021).

58 OECD (2018). *Personalised Pricing in the Digital Era.* Note by the United Kingdom (28 November 2018) DAF/COMP/WD (2018) 127, 9, para 25. In the United Kingdom, under the application of the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013 implementing the Consumer Rights Directive, the sanction for non-disclosure of this information would be breach of statutory duty (Reg 18) and /or breach of contract.

59 See for example Ben-Shahar O and Schneider CE (2016). *More than you Wanted to Know: The Failure of Mandated Disclosure.* Princeton University Press, Princeton; Howells G (2005). The potential and limits of consumer empowerment by information. (32 *Journal of Law and Society* 349, 351.

60 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 23.

61 For more on this, see Duivenvoorde BB (2015). *The Consumer Benchmarks in the Unfair Commercial Practices Directive.* Springer International; Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 24-36.

62 Case C-210/96 *Gut Springenheide GmbH and Rudolf Tusky v Oberkreisdirektor des Kreises Stenfurt* [1998] ECR I-4657, [31].

63 For more on this and the origin of the standards in free movement of goods doctrine rather than consumer protection, see Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 24–29, which provides many references to other scholars.

64 In the United Kingdom, the CMA can impose remedies to fix market failures without the need to demonstrate a breach of competition or consumer laws under Part 4 of the Enterprise Act 2002. The CMA can also carry out market studies as a preliminary to establish the need for an investigation. See for example, CMA (2020). *Market Study on Online Platforms and Digital Advertising.* The study concluded no investigation should take place (para 9.37).

investigations can be very powerful tools in understanding digital markets and finding adequate solutions to the harm they can cause consumers. However, because of limited resources, they are currently not used as often as they may be needed, thus reducing the overall impact they can have on consumer welfare.[65] There is also the possibility of enforcement errors[66], sometimes depriving consumers of useful features of a market.[67] Besides, at present, market investigations are not able to repair harm already suffered, which is a key problem when trying to protect consumers already affected. This is because "market investigations do not lead to fines or follow-on damages actions. The remedies which can be imposed may be either structural or behavioural to ensure more effective competition in the relevant market for the future."[68]

The Taskforce advice in the United Kingdom shows that many of those difficulties ought to be ironed out, and there is strong support for reforms in this area to enable market investigations to become more agile and effective tools.[69] However, to be triggered, market investigations will tend to require an already-significant consumer detriment or prospect of it. Concerning personalized pricing, this would be unlikely to be a remedy because instances of personalized prices are not yet widespread.[70]

This also means that intervention in the form of a ban on personalized pricing is unlikely to yield the best results. In the United Kingdom, for example, government has intervened in setting a cap on energy prices[71] which has been disappointing. Another measure was the introduction of Open Banking.[72] For some forms of covert price personalization (e.g. the loyalty penalty paid by those who remain loyal to their providers and do not switch) the "exploitation of these consumers by charging them significantly higher prices and providing poorer service is a sign of a market that is not working well and should be tackled vigorously".[73] But government intervention is not always adequate[74], possible and/or forthcoming. This is certainly the case with personalized pricing, and therefore what makes it a prime candidate for modelling the deployment of consumer law, in the absence of adequate competition law tools to effectively tackle consumer detriment.

If left unchecked, the use of personalized pricing may lead to distrust in online markets, in turn leading to disengagement.[75] This may result in a downward spiral, whereby consumers believe all businesses are intent on behaving badly and have adverse effects on the functioning of the market.[76] Consumer law enforcement can be swifter than competition law enforcement and prevent a deterioration to the point where not even competition enforcement would suffice to restore a fair market outcome.

Consumer protection authorities can step up by imposing a higher standard of consumer protection achieved. They can do this by adopting a holistic approach to the assessment of consumer detriment

65 BEIS (2018). *Modernising Consumer Markets.* Consumer Green Paper. (April 2018, Cm9595); Annex B: The CMA's use of powers: 70.

66 Ahlborn C and Piccinin D (2010). Between Scylla and Charybdis: Market investigations and the consumer interest. In Rodger BJ (ed), *Ten Years of UK Competition Law Reform.* Dundee University Press: 188–190.

67 See for example, Competition Commission (2009). *Market Investigation into Payment Protection Insurance* (29 Jan 2009): 10, 442–464. The Commission banned the sale of PPI products at the point of sale, ignoring the benefit some consumers derived from the convenience.

68 Rodger B and Macculloch A (2014). *Competition Law and Policy in the EU And UK.* Routledge: 142.

69 CMA (2020). *New Pro-competition Regime for Digital Markets*. Advice of the Digital Markets Taskforce (December 2020, CMA 135). Appendix G, G20-21.

70 CMA (2018). *Pricing Algorithms*. Economic working paper on the use of algorithms to facilitate collusion and personalized pricing. CMA: 94; Wild M and Thorne M (2018). A price of one's own: An investigation into personalised pricing in essential markets. Citizens Advice; See also European Commission (2018). *Consumer Marker Study on Online Market Segmentation through Personalised Pricing/ Offers in the European Union.* Available at <https://ec.europa.eu/info/publications/consumer-market-study-online-market-segmentation-through-personalised-pricing-offers-european-union_en>

71 This move has been criticized. See for example, Dodsworth T and Bisping C (2019). Energy Price Cap – a Disservice to Consumers. 8 *EuCML*: 53–64; Mantzari D and Ioannidou M (2019). The UK Domestic Gas Electricity (Tariff Cap) Act: Re-regulating the Retail Energy Market. 82. 3 *Modern Law Review:* 488–508.

72 CMA (2014). *Personal Current Accounts and Banking Services to Small and Medium-sized Enterprises – Decision on market investigation reference.* Available at <https://assets.publishing.service.gov.uk/media/545aa20bed915d138000001a/Decision-MIR-Final_14.pdf (accessed 21 March 2021).

73 Dept for Business, Energy and Industrial Strategy (BEIS) (2018). *Modernising Consumer Markets.* Consumer Green Paper (April 2018, Cmd 9595): para 1.6.

74 OECD (2018). *Personalised Pricing in the Digital Era*: 12, para 38.

75 OECD (2018). *Personalised Pricing in the Digital Era:* 9, para 27.

76 Ibid.

and by looking at whether markets can self-correct.[77] In the absence of market investigations, it would be more effective therefore to regard the use of price discrimination to extract unfair rents as an unfair commercial practice regulated in the United Kingdom by the Consumer Protection from Unfair Trading Regulations 2008 (CPRs thereafter). Deploying more forceful and systematic consumer law enforcement will be welcome because price discrimination practices are not only detrimental to consumers but also to firms committed to treating consumers fairly.

F. Modelling intervention in consumer digital markets: Deploying the CPRs in response to unfair personalized pricing

The CPRs 2008 are complemented by the Consumer Protection (Amendment) Regulations 2014, which created a right of private action,[78] although the legislation is primarily focused on providing tools for public enforcement. The legislation largely derives from European law and the implementation of the Unfair Commercial Practices Directive 2005/29/EC (UCPD). This applies to all commercial practices that occur "before, during or after a transaction between a business and a consumer". The focus is on the economic harm consumers suffer as a result of practices. The legislation is organized around three levels of protection. First, a number of practices are included in Schedule 1 of CPRs 2008 and are banned outright. Second, the CPRs 2008 also contains a set of specific provisions that define the way in which misleading and aggressive practices are to be caught (Reg 7 CPRs). Within the misleading practices, omission as well as actions are caught (Reg 5 and 6 CPRs). Finally, a general clause aims to offer a test to control any practices that do not fit neatly under the previous provisions (Reg 3(2) CPRs).

The legislation is built on the principle of "not to trade unfairly": that is, all that is not forbidden is permitted – that all that does not meet the legal threshold for unfairness is in fact fair. This means that unless we can find personalized pricing to be unfair it will not be possible to sanction the practice. There is a danger that by electing to impose a simple obligation to disclose the use of automated decision-making in the personalization of the price, as is the case in the European Union, traders can absolve themselves of any liability. Yet, some very simple adjustments are possible for making use of the CPRs to tackle detrimental personalized pricing, and strengthen the nature of the disclosure. The application of the legislation in the United Kingdom requires three main adjustments:

- a change in the evaluation of the average consumer standard to include bounded rationality;
- a more systematic use of the general clause alongside a workable definition of professional diligence;
- proportionate and dissuasive sanctions.

1. Re-interpreting the "average consumer" test to include bounded rationality

The CPRs rest on the standard of the "average consumer", thus restricting the protection that can be granted to consumers. There is a need to recognize that the average consumer is in fact boundedly rational. All consumers have limitations in dealing with the amount and complexity of information that accompanies making fully informed purchasing decision.[79] This leads to a necessary paradigm shift.

For too long, the expectation has been that the onus is on consumers to make it their responsibility to protect their consumer rights and privacy and personal data – all of which are increasingly threatened in digital markets. It has been expected that they take action to redress the balance thanks to the toolkit legislators

[77] Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 9.

[78] For more on this right in the United Kingdom as well as United Kingdom case law, see Riefa C and Saintier S (2016). Unfair commercial practices directive: Remedying economic torts? in Gilliker P (2016, updated 2018). *Research Handbook in EU Tort Law.* Edward Elgar: 293-317. Also see the BEIS *Guidance* document (updated 2018).

[79] See van Boom VH (2011). Price intransparency, consumer decision making and european consumer law. *Journal of Consumer Policy.* 359: 360–61; Henry P (2005). Is the Internet empowering consumers to make better decisions, or strengthening marketers' potential to persuade? In Haugtvedt CP, Machleit KA and Yalch RF (eds) (2005). *Online Consumer Psychology: Understanding and Influencing Consumer Behavior in the Virtual World.* Routledge, London.

have put at their disposal. They are often blamed (although perhaps not openly) for their inaction and their failure to go to court or to use other avenues for redress (ADR) to claim their rights. Competition failures have also pointed to consumer disengagement or inactivity/ inertia as a cause.

The reality, however, is that consumers are not able to be all those things and always behave as expected. There is therefore a need to reverse expectations. It should no longer be about consumers defending themselves (using rather imperfect instruments in the process), but about businesses behaving fairly. The assumption should be that consumers are entitled to trust sellers and manufacturers.[80] The legislation in place does not bar the use of a lower standard to define the expected behaviour of consumers. Indeed, there is nothing in the UCPD at the European Union level or the CPRs in the United Kingdom to stop the courts departing from the "average consumer" test. However, courts dealing with consumer law cases have not yet taken the opportunity to depart from this mainstream interpretation. This is in stark contrast with the interpretation given in trademark cases.[81] It is therefore possible to include bounded rationality in the test of an average consumer and assist consumers in future.

2. Developing a more systematic use of the general clause

It is difficult to apply the tests for misleading omissions or actions to personalise pricing. The so-called general clause instead offers a test to control any unfair practices that do not fit neatly under the other provisions of the CPRs. A more systematic use of this general clause is essential. The general unfairness clause acts a safety net to make the legislation future-proof[82] and flexible enough to adapt to the evolution of the market[83] although it should only be applied to close regulatory gaps.[84]

a. Difficulties in applying the UCPD to personalized pricing

Regarding price personalization, one could envisage it is as a misleading action or omission[85]. But the two are in fact intertwined. For example, a commercial practice is a misleading omission if it omits, hides or provides – in a manner which is unclear, unintelligible, ambiguous or untimely – information that the average consumer needs to take an informed transactional decision, and, as a result, causes, or is likely to cause, the average consumer to take a transactional decision that they would not have otherwise taken. However, in this instance the price is indeed disclosed to the consumer and it is accurate. What is not being disclosed is the manner in which the price is arrived at and the fact that the practice leads to obfuscation in order to artificially increase the consumer's search costs.

There is no duty to disclose this information under the CPRs. It is only implied via the prohibition to hide material information. although either the price needs to be disclosed; or, where the nature of the product is such that the price cannot reasonably be calculated in advance, the manner in which the price is calculated needs to be disclosed (Reg 5(4)(g) CPRs on misleading actions). But this duty to disclose as it stands may be too narrow because the provision of detailed information about how the complex personalized tariff is set up is likely to continue adding to the consumer's cognitive overload, and still contribute to high search costs. This is because consumers would not be able to easily compare this price with another, especially if a large segment of suppliers use similar algorithms to personalize prices.

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80 Ramsay I (1993). Consumer law and structures of thought: A comment. *Journal of Consumer Policy.*16: 79.

81 See for example, Case C-342/97 *Lloyd Schuhfabrik Meyer & Co GmbH v Klijsen Handel BV* [1999] ECR I-03819 para 26 or joined Cases C-236/08 and C-238/08 *Google France and Google Inc et al. v Louis Vuitton Malletier et al.* [2010] ECR I-02417. See also Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 24-37, where they cite relevant scholarly works.

82 Abbamonte GB (2007). The unfair commercial practices directive and its general prohibition. In Weatherhill S and Bernitz U (eds) (2007). *The Regulation of Unfair Commercial Practices under EC Directive 2005/09, New Rules and New Techniques.* Hart Publishing, Oxford, Oxford: 20.

83 Anagnostaras G (2010). The unfair commercial practices directive in context: From legal disparity to legal complexity? *Common Market Law Review.* 47(1): 147, 152.

84 Micklitz HW (2009). Unfair commercial practices and misleading advertising. In Micklitz H-W, Reich n and Rott P (eds) (2009). *Understanding EU Consumer Law.* Intersentia, Cambridge.

85 In some specific circumstances they could also be aggressive practices. See Sibony AL and Clifford D (2020). La personnalisation illicite: La perspective du droit européen de la consommation *Cahiers du CeDIE* 2019/6. Available at <https://uclouvain.be/fr/instituts-recherche/juri/cedie/cahiers-du-cedie.html> (accessed 21 March 2021).

This information, however, ought to be considered for inclusion in the list of information deemed to be material in the context of an "invitation to purchase" (Reg 6(4) CPRs on misleading omissions). This is because the market might tend to self-correct if all suppliers need to divulge that the price shown is less advantageous than what would be found elsewhere.[86] It is compelling to argue that the information is needed by the "average consumer" to take an informed transactional decision. Specifically, the "need" for the "average consumer" arises from the fact that consumers are overwhelmed because price personalization can remove choice and de facto put a high barrier on consumers searching for alternative prices. This is because where all prices are personalized, consumers would have a high-cost barrier to finding out the prices proposed to others in order to assess whether their price is a good deal or not. Gómez explains that if firms can, "in [a] cost-effective way, correct inadequate levels of information on the part of consumers, their practices should be deemed unfair if they do not engage in these educational or corrective actions. In cost–benefit terms, they are [the] cheapest providers of a social benefit".[87]

However, in front of the difficulty to engage misleading actions or omission, it may be easier to trigger the use of the general clause. The general clause (Reg 3 CPRs 2008) is a cumulative test. The practice must be contrary to the requirements of professional diligence; it must materially distort, or be likely to materially distort, the economic behaviour of the average consumer.[88]

b. *Using the general clause effectively: Practice that is contrary to professional diligence*

Professional diligence is the "standard of special skill and care which a trader may reasonably be expected to exercise towards consumers, commensurate with honest market practice and/or the general principle of good faith in the trader's field of activity" (Reg 2 CPRs 2008). It suggests good business conduct. It encompasses not only honesty, but also competence on the part of the trader.[89] A breach of the prohibition on misleading and aggressive practices is in itself contrary to the requirements of professional diligence. The presumption is that such behaviours will always automatically represent a breach of professional diligence.[90] For example, the Italian authorities fined Facebook 10 million euros for unfair commercial practices. The first practice concerned the way in which Facebook presented its services as free during the registration process, without informing consumers that their data will be collected, processed and used for commercial purposes – a misleading omission. The second practice concerned the use of personal data and transfers with third party websites and apps, without users' express consent. The authority considered this practice to be aggressive (exercising undue influence) in that the function was pre-activated, thus putting the onus on consumers to opt out.

Therefore, the use of price personalization for example, without informing the consumer, could be construed as a misleading practice and evidence of a poor standard of professional diligence on the part of the online platform that uses it. If consumer law enforcement is deployed in such a way that operators know that such practices will attract sanctions (that are proportionate but dissuasive), firms are likely to want to do one of two things: either inform consumers, thereby educating them, (what economists describe as de-biasing); or stop the practice where it will not lead to the consumer receiving a more advantageous price, because it would no longer be worthwhile to do so without risking a sanction.

There is very little case law that addresses the notion of professional diligence in any detail[91] outside the

86 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford. Ch.4: 79–108. This is what Esposito (n 57) calls the 'impersonal' price.

87 Gómez F (2006). The Directive on Unfair Commercial Practices: a Law and Economics Perspective. *European Review of Contract Law.* 2(1): 4-34.

88 In the United Kingdom, a right of private action is offered under the CPRs, but only for misleading action or aggressive practices. In this sense, the general clause is incomplete and does not offer the highest standards of protection. This would inevitably need to be addressed, for private redress (which should include individual as well as collective actions) ought to come and complement public enforcement efforts.

89 Abbamonte GB (2007). The unfair commercial practices directive and its general prohibition. In Weatherhill S and Bernitz U (eds) (2007). *The Regulation of Unfair Commercial Practices under EC Directive 2005/09, New Rules and New Techniques.* Hart Publishing, Oxford, Oxford: 22.

90 Case C-435/11 *CHS Tour Services GmbH v Team 4 GmbH* [2013] ECR I-0000, [36].

91 A few references are found in Advocate General's opinion (paras 89–94) in Case C-304/08 *Zentrale zur Bekämfung unlautern Wettbewerbs eV v Plus Warenhandelsgesellschaft mbH* [2010] ECR I-00217; Case C-540/08 *Mediaprint Zeitungs- und Zeitschriftenverlag v Österreich-Zeitungsverlag GmbH* [2010] ECR I-10909, para 46; Opinion of Advocate General in Case C-453/10 *Jana Pereničová and Vladislav Perenič v SOS finance spol sro* [2012] ECR I-0000.

normal understanding that misleading or aggressive practices are not compliant with the standard. However, professional diligence is defined by reference to other standards, such as honest market practices and good faith.

Honest market practices are normally defined by reference to the trader's field of activity, and codes of practices may play a role in the interpretation.[92] There could be a potential danger that in markets dominated by unfair traders, the standard of market practices could be particularly poor, but a certain standard of honesty is required.[93] For example, in the United Kingdom, *OFT v Ashbourne*[94] noted that one can expect from a professional that

> "he does not include unfair terms in the terms and conditions recommended to clients; that one does not add any terms that are likely to mislead consumers regarding the rights and obligations of the gym club or those of the consumer; that one does not omit material information and provide information that is clear; that one does not demand payment that the consumer is under no obligation to pay. By recommending to gym clubs that they use terms contrary to this advice and insist on their inclusion into contracts, the defendant did not behave in a way that conformed with honest market practices".[95]

Good faith can be added to the assessment of honest market practices or substituted for it. Good faith is a pre-existing principle that derives from the Unfair Terms in Consumer Contracts Directive.[96] The test for unfairness in Article 3(1) of the Unfair Terms Directive is as follows: A contractual term which has not been individually negotiated shall be regarded as unfair, if contrary to the principle of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer.

In this context, good faith is not a stand-alone requirement, but is rather integrated into the wider fairness test. It is necessary to assess "whether the seller or supplier, dealing fairly and equitably with the consumer, could reasonably assume that the consumer would have agreed to such a term in individual contract negotiations".[97]

c. *Using the general clause effectively: Material distortion of the economic behaviour of the consumer*

The material distortion of the economic behaviour of the consumer means using a commercial practice to appreciably impair the consumer's ability to make an informed decision, thus causing the consumer to take a transactional decision that they would not have otherwise taken. A transactional decision refers to, among other things, any decision taken by a consumer, whether to act or to refrain from acting, concerning whether, how and on what terms to purchase or retain a product.

> The "requirement of material distortion does not introduce a fully-fledged effects-based test of the type adopted in the enforcement of competition law.[98] Whilst the distortion of consumer decision making must ultimately cause an inefficiency, leading to a reduction of consumer surplus, no direct inquiry into whether, how and to what extent the unfair commercial practice resulted in consumer harm is formally required in the unfairness test."[99]

92 Case C-109/17 *Bankia SA v Juan Carlos Marí Merino, Juan Pérez Gavilán, María de la Concepción Marí Merino* [2018] ECR I-0000, para 57.

93 Durovic M (2016). *European Law on Unfair Commercial Practices and Contract Law.* Hart Publishing, Oxford: 82, explains that case law has developed, notably in the area of trademark law, which can serve as a guide to how it could be applied in the sphere of unfair commercial practices. See Case C-252/07 *Gerolsteiner Brunnen GmbH v Putsch GmbH* [2004] ECR I-691, para 24; Case C-558/08 *Portakabin BV v Primakabin BV* [2010] ECR I-06963, para 67 confirmed by Case C-252/07 *Gerolsteiner Brunnen GmbH v Putsch GmbH* [2004] ECR I-691, para 24.

94 [2011] EWHC 1237 (Ch).

95 [2011] EWHC 1237 (Ch), [227].

96 It is also a concept that is known to common law lawyers. The implied terms in the Sale of Goods Act also rest on the notion of good faith: see, for example, Steyn J (1997): Contract law: Fulfilling the reasonable expectations of honest men. 113 *Law Quarterly Review* 433, 442.

97 Case C-415/11 *Mohamed Aziz v Caixa d'Estalvis de Catalunya, Tarragona i Manresa (Catalunyacaixa)* [2013] ECR I-0000, para 69. The position was confirmed in later case law. See, eg Case C-342/13 *Katalin Sebestyén v Zsolt Csaba Kövari* [2014] ECR I-0000, para 28.

98 For a critical appraisal of the utility of the consumer welfare standard in competition law in digital markets, see Gökçe Dessemond E (2019). *Restoring Competition in 'Winner-took-all' Digital Platform Markets*. UNCTAD (2019) Research Paper No. 40, UNCTAD/SER.RP/2019/12.

99 Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford: 200.

The behaviour of the consumer must have been appreciably impaired, but product placement, brand differentiation and the offering of incentives are seen as legitimate influence.[100] Mere puffery is acceptable and there is no prohibition on the trader using commercial tactics with the purpose of affecting the decision-making process.[101] It is not clear how much of a change or nudge in behaviour is therefore required to trigger protection.

Willet explains that there is a risk that the general clause would be limited to a transparency paradigm[102] which would make informing the consumer a legitimate defence in any allegation of the violation of professional diligence. There is also a risk that "traders can argue that their conduct did not distort the economic behaviour of consumers, therefore shifting the burden of proof onto the plaintiff to produce evidence to the contrary".[103]

According to Siciliani, Riefa and Gamper

> "to achieve a higher standard of consumer protection, the normative standard of professional diligence should discourage opportunism but promote trustworthiness and, more prescriptively, assistance. Accordingly, it could be argued that the material distortion is due to the trader's implicit refusal to assist both potential and current customers to avoid making mistakes. Therefore, there would be no need for a complex inquiry into the conduct of competing traders in order to establish the appropriate benchmark of professional diligence."[104]

The general clause could therefore be used successfully with regard to failures to disclose a price (dis-)advantage, as is the case with price personalization.

Under the general clause (Reg 3 CPRs), the practice of price personalization (which does not procure the consumer with a price advantage) could be considered overall as contrary to professional diligence, as it is adopted with a view to confusing consumers and pushing them into purchasing decision they would not otherwise make. This is therefore contrary to honest market practices, which should promote fair competition in the marketplace and not the apportionment of custom between competitors because of consumer disengagement. Besides, the practice seems to also run contrary to good faith, as the consumer would be unlikely to agree to the practice had they been given a choice (and understood the disadvantage that would follow). This brings into question the issue of the remedies that ought to be available to consumers.[105]

3. Proportionate and dissuasive sanctions

Consumer law tools are often not chosen, because they cannot yield the same sanctions and be as dissuasive as competition law enforcement may be. For example, in terms of private redress when consumers are charged using a personalized price, consumers exercising rights to a price reduction or a right to unwind (in the very limited framework of the law) seems unsatisfactory. De Graaf favours a return of goods minus a usage charge, while acknowledging that this is not a dissuasive sanction, but that it could be complemented by damages claims, collective actions and administrative sanctions.[106] Dissuasiveness ought to be an essential ingredient because there needs to be a deterrent to the use of price personalization that effectively acts as discrimination mechanisms and reinforces the asymmetry between consumer and trader. Dissuasiveness can be achieved if there is predictability that enforcement will be forthcoming upon detection and that regular market surveillance will be conducted. Currently in the United Kingdom, the competent authority needs to seek a court order

[100] Twigg-Flesner C, Parry D, Howells G and Nordhausen A (2005). *An Analysis of the Application and Scope of the Unfair Commercial Practices Directive.* (Department for Trade and Industry, para 2.29). Available at <https://webarchive.nationalarchives.gov.uk/+/http:/www.bis.gov.uk/files/file32095.pdf> (accessed 25 May 2020).

[101] Durovic M (2016). *European Law on Unfair Commercial Practices and Contract Law.* Hart Publishing, Oxford: 90.

[102] Willett C (2010). Fairness and consumer decision making under the unfair commercial practices directive. *Journal of Consumer Policy*. 33: 247, 265.

[103] Collins H (2010). Harmonisation by example: European laws against unfair commercial practices. *Modern Law Review.* 73(1): 97, 101.

[104] Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford.

[105] On this issue, see de Graaf T (2019). Consequences of Nullifying an agreement on account of personalised pricing. 8 *EuCML 5*: 184–193.

[106] See in the context of Belgian and Dutch law, Ibid, 193.

for violations of the CPRs for which the trader is not willing to give undertakings. This is a long and expensive process that means that only the most blatant and attention-grabbing violations are likely to be pursued. However, there is support for reform[107] and legislating to give consumer enforcers the power to impose fines and have the powers they need (notably administrative powers) to incentivize firms to comply with the law.[108]

Moving to an administrative system could enable United Kingdom consumer law enforcers to be more efficient, as they may have been in competition law where such administrative powers with the ability to fine contravening businesses up to 10 per cent of turnover already exists. This would be an effective tool to making consumer law a more equal partner to competition law and pave the way for enforcers to use instruments that best fit the practices and select the one with the best chance of impacting the market. It would also enable early intervention via consumer law to avoid markets evolving in a downward spiral and consumer detriment being felt more widely. In this way, consumer law enforcement could be a powerful ally of competition law enforcement and tackle unfair practices that also hamper fair competition and hurt fair competitors without the need to resort to expensive, time-consuming and resource-intensive competition law analysis. Under such a regime, it would be possible to envisage consumer enforcement action against price personalization that could prevent markets from becoming systemically uncompetitive and cause consumer detriment. In the interim, punctual intervention will have a positive effect in as much as it signals that enforcers are to use the full breadth of their enforcement powers and not simply focus on competition law to ensure that they can facilitate market fairness.

G. Conclusion

This chapter advocated the need for a broader enforcement mix, where an economic approach to consumer enforcement could assist not only in protecting consumers more efficiently but also in improving competition. It demonstrated that this shift is not only desirable in digital markets but in fact essential. The chapter showed how current consumer law rules concerning unfair commercial practices can be adapted to deliver those results and start making changes in the structure of digital markets with only a few simple amendments and changes in practice. In particular it highlighted how this could work with price personalization. Those include a change in the evaluation of the average consumer standard to include bounded rationality; a broader use of the general clause alongside a workable definition of professional diligence in the digital era; and the adoption of proportionate and yet dissuasive sanctions. Ultimately, protecting consumers in digital markets through the application of consumer law requires reversing the expectation that it is for the consumer to beware, and instead expect digital businesses to behave. Adopting a positive duty to trade fairly is a necessary paradigm shift. Over time, this "fairness-by-design" approach will emerge as the only acceptable way to compete.[109] As a result, consumer law enforcement can come to be considered an essential tool to bolster competition in digital markets.

[107] In the CMA (2018), *Loyalty Penalty Super-complaint*. Available at <https://www.gov.uk/cma-cases/loyalty-penalty-super-complaint> (accessed 21 March 2021), the CMA outlined plans to tackle the issue and it was followed by the government response to this document, which took the form of a letter from the Secretary of State to the CMA's Chief Executive, which supported the idea of a reform in Competition and Market Authority Loyalty Penalty Investigation report: Government Response, Letter from Secretary of State Greg Clark to Andrea Coscelli, Chief Executive of the CMA on the Loyalty Penalty (18 June 2019). Available at https://www.gov.uk/government/publications/competition-and-markets-authority-loyalty-penalty-investigation-report-government-response (accessed 21 March 2021.

[108] See also CMA (2020). *A New Pro-competition Regime for Digital Markets*, which confirms support for reforms.

[109] Siciliani P, Riefa C and Gamper H (2019). *Consumer Theories of Harm - an Economic Approach to Consumer Law Enforcement and Policy Making.* Hart Publishing, Oxford.

CHAPTER III: THE SHARING ECONOMY AND COMPETITION

Max Huffman

A. Introduction

The chapter introduces the sharing economy in general, studying its definition, history and global expansion, and its economic rationale. This introductory discussion observes recent explosive growth driven by instant mass communication combined with either increasing willingness of regulators to accommodate technology-based innovation, or the inability of regulators to impede it. The chapter analyses the sharing economy as a disruptive force in regulated service sectors. The definitional features of the sharing economy include enterprise structures that may be able to serve as alternatives to public regulation, resolving the trust problem that limits economic activity. The chapter recognizes the countervailing problems with privatizing the regulator's role, including safety and privacy concerns and transition costs. From there the discussion turns to the host of competition policy issues raised by the sharing economy, how different jurisdictions have handled those issues, and best approaches to resolving those issues. The chapter explains the sharing economy and its regulatory and competition policy implications, and provides a roadmap to improve regulatory responses.

B. The sharing economy

1. Definition

The sharing economy has varied definitions, but each includes the sharing of capital assets (whether personal property, real property, financial, human) without transferring ownership. (Retamal & Dominish 2017). The sharing takes place over a digital platform with at least two parties other than the platform involved. Almost all definitions consider digitalization to be a defining component of the sharing economy (Retamal & Dominish 2017 (citing sources), Anderson & Huffman 2017, World Bank 2018, UNCTAD 2019). Others require more, with one definition including the idea of disrupting or arbitraging regulatory structures (Anderson & Huffman 2017; Yuana, Sengers, Boon & Raven 2018). There is an alternative, broader definition, which includes business-to-consumer transactions in the sharing economy, and it is not discussed here (PWC 2020).

There are many views of the sharing economy. One is a means for well-capitalized firms to extract rents from two sides – suppliers (e.g. rideshare drivers) and consumers (e.g. rideshare passengers), avoiding consumer- and worker-protection regulation. Alternatively, it can be seen as a unique economic enterprise structure enabling the deployment of fallow assets, allowing new entrant entrepreneurs (as suppliers), and reducing costs and increasing service to consumers. Lawmakers and regulators should be aware that sharing-economy enterprises can provide tremendous benefits, but they should be required to protect both consumers and workers.

2. Historical background

Broadly defined, the sharing economy has no known historical origin. Two authors identify the first world war-era recession as the genesis of automobile-based ridesharing services (Vanderschuren & Baufeldt 2017). However, the modern sharing economy's origin and growth begins with the Internet. One source describes online auction/retail site eBay as "one of the first enablers of the sharing economy" with a "global online marketplace" (Keycafe 2019). Craigslist also dates to 1995 (Jackson 2018). One source identifies the first digital platform for lodging services as Booking.com, originating in 1996 (World Bank 2018). Since 1995, enterprises have emerged across a range of industries including: ridesharing and lodging; retail and consumer goods; community-based tourism (e.g. in-home dining); entertainment; and finance (e.g. Kickstarter for crowdfunding businesses) (PWC 2015). Many modern applications rely on broadly disseminated cellular technology and the modern smartphone. Uber (ridesharing) and Airbnb (accommodation) both launched in 2008 with Ola (ridesharing, based in India) following in 2010. The earliest firms are United States-

based technology start-ups, but in terms of both the home country of the sharing platform and the location of the transactions facilitated, sharing-economy firms and transactions have become a worldwide phenomenon (Retamal & Dominish 2017; World Bank 2018).

In the first decade since the development of modern smartphone-based platforms, worldwide revenue for the platforms reached $18 billion (Statista 2019), not counting revenues earned by workers or hosts transacting over the platforms. By 2014, Uber was booking more than 150,000 rides daily and Airbnb facilitating more than 140,000 lodging rentals daily (PWC 2015). Pre-Covid studies predict continued rapid growth by platforms, with an extreme, though frequently reported, prediction being $335 billion earned by platforms in 2025. A more measured prediction is $40 billion earned by platforms in 2022 (PWC 2015; Brookings 2017; Statista 2019).

a. The impact of the Covid-19 pandemic

Beginning in early 2020, countries worldwide engaged in massive economic lockdowns in response to the Covid-19 pandemic, with the effects of drastically limiting social and commercial exchange and driving domestic output figures downward by substantial amounts (UNCTAD Nov. 2020; World Bank (I) June 8, 2020). UNCTAD estimates a total contraction in 2020 of 4.3 per cent (UNCTAD Nov. 2020: 8, 13). UNCTAD estimates developed economies will suffer the greatest contraction, at close to 6 per cent, compared to just above 2 per cent for developing economies, and will likewise experience a weaker recovery in 2021 (Ibid.).

The impact on the sharing economy will likely mirror or perhaps exceed that of the larger economy, as the very nature of sharing-economy transactions seems to require social interaction. Government-imposed lockdowns requiring consumers to remain in their homes undermine any sector that depends on consumer spending out of the house. Predictably, the immediate effect was for Uber to experience an 80 per cent drop in ridership and Airbnb to see massive cancellations of bookings (Toyama 2020).

It is also likely that the impact on the sharing economy would be unevenly distributed for several reasons. First, a more established firm, like Uber, can weather the contraction because of ease of access to capital. Second, a more established firm can more readily shift its work to adjacent markets – thus, growth in order-in practices for food or consumer goods – leveraging existing brand reputation as well as capital resources. Third, one might expect to see consumers prefer to shop for known brands as markers of safety in times of fear and uncertainty, and for brands to capitalize on consumer concerns with strong positions on safety and cleanliness (Gordon 2020). Fourth, not every sharing-economy sector presents the same concerns for risky interactions with strangers or violations of lockdown restrictions. Lesser-developed industry sectors, including courier and package-delivery services are doing very well (Toyama 2020). Some impacts are counterintuitive: home-sharing, which can be accomplished without any face-to-face interaction and which might allow consumers to achieve greater comfort in a more spacious environment than their own homes, do well. However, existing evidence suggests that Airbnb experienced substantial declines in bookings as a result of lockdowns (Gordon 2020), and, at the time of this writing, the long-term impacts on the sharing economy across all industries are unknown.

As one marker, after an initial precipitous drop, the Uber Inc. share price has recovered and as of September 2020 was approximately equal to its value in September 2019. Lyft, a much smaller competitor in ridesharing, suffered a similar extreme drop with a low point on 18 March 2020, but did not recover as quickly – as of September 2020 its share price was approximately 60 per cent of the same month in 2019. In retail, eBay Inc. saw its share price increase 25 per cent year-on-year as of September 2020. In lodging, Booking.com, the original lodging platform, lost nearly half of its market capitalization early, but as of September 2020 was down only 20 per cent from its September 2019 market valuation. Stock prices are an imperfect barometer and in particular miss a large number of market participants. Significantly, none of Airbnb (lodging), Ola Taxi (ridesharing, based in India), Didi Chuxing (ridesharing, based in China), Blablacar (ridesharing, European Union-France-based start-up), or Grab (ridesharing, based in Singapore) had publicly traded shares at the time of this writing.

3. The role of instant communication in growth of sharing economy

Early sharing-economy platforms such as eBay, Craigslist, and Wikipedia, are not known for their mobile offerings. Modern sharing-economy platforms,

and in particular ridesharing platforms, depend heavily on mobile communication and in particular the smartphone. The distinction is partly one of chronology, as early platforms developed before the broad dissemination of cellular data networks, and thus built business models compatible with Internet connectivity tied to a static location. The distinction is also partly one of the industry in question, with sharing-economy platforms relating to transport and travel more likely to be dependent on mobile computing and cellular networks. There are exceptions: ridesharing may be arranged by landline. However, many features including location-matching, quality ratings, and real-time matching, operate best with or necessitate mobile handsets and data networks.

Thus, improvements in access to cellular communication, including data networks, can be expected to facilitate the growth of the sharing economy. Providing services on a platform enterprise requires ownership or use of a mobile handset at least during the time of operation. Consumers have slightly greater flexibility through, for example, the ability to book transactions for family members, colleagues, or friends, in effect sharing a single account and single mobile handset. The requirement of mobile networks and access hardware is a limitation on growth in some economies where smartphones are not universal.

4. The sharing economy provides trust mechanisms

A commonly accepted requirement for economic progress is trust among market actors (Cooter 2005). Trust arises through mechanisms including in-group relationships and effective regulatory oversight. In societies lacking effective mechanisms for building trust, markets are slow to develop, which retards economic growth. Sharing-economy mechanisms can serve as a proxy for in-groups and effective governmental regulation.

One feature of sharing-economy platforms that serves the trust-building function is their rating systems. Each transaction may be rated based on a handful of relevant factors including quality of service, safety and comfort. A sufficient number of ratings allows a degree of certainty as to the accuracy of the aggregate of the observations. Contracting with an unknown service provider (and an unknown consumer) presents less risk with a reliable mechanism for assessing that provider (Brookings 2017). If the ratings systems achieve sufficient public acceptance to overcome the trust problem, that should have economic benefits. That being said, ratings are not substitutes for regulation in markets where safety is a concern (Id.). Safety requirements, such as fire codes in lodging and mechanical inspections in cars, are not things that consumers can be expected to observe and incorporate into ratings.

A second feature is the brand strength of the platform itself. There is an incentive for the platform to establish a private regulatory scheme regarding quality, safety, and comfort, and to police its users, whether providers or consumers, for compliance with the regulations. For instance, during the Covid-19 global pandemic, Uber offered detailed information to drivers and riders on how to maintain a clean driving and riding environment and how to wear a facemask (Uber 2020). Uber updated its terms of service to require drivers to wear masks, to limit the number of passengers, and to encourage drivers to refuse service to passengers not wearing masks (The Verge 2020). Airbnb announced “standards” relating to safety, security, fairness (including non-discrimination), authenticity and reliability, the violation of which is a basis for suspension or expulsion from the platform (Airbnb Terms, Standards). Nonetheless, many of the platforms rely on existing government-imposed regulation for quality, safety, and comfort, potentially undermining the belief that a platform can regulate itself effectively. For example, the Grab (rideshare) terms of service require of workers:

> “you have all appropriate licenses and approvals in respect of, the vehicle, motorcycle, bicycle or other mobility device (“Vehicle”) which you intend to use when providing transportation or delivery services for hire, and such Vehicle is in good operating condition and meets the industry safety standards for Vehicles of its kind”. (Grab para. 3.2.2, 2020).

Sharing-economy platforms can also overcome something as mundane as a language barrier, offering interfaces in multiple languages. For travellers this is a commonly observed advantage (Okun 2019). One would likewise expect a benefit in a single community comprised of interacting language groups.

On the other side of the question of service quality, the platform can ensure payment to the provider through

ex ante collection from the consumer (perhaps with payment delayed sufficiently to permit the consumer to object in the case of non-performance). The inbuilt payment system in many sharing-economy applications ensures collection and payment, protects against overcharges and overpayment, and facilitates the matching of payment method with collection method – where, for example, a provider does not have the capacity to take payment by credit or a particular payment network does not interface with either the provider's or the consumer's financial institution.

These advantages are part of a larger reality of platforms. It is possible that each side of the platform – the provider and the consumer – enters into a long-term mutually advantageous relationship with the platform itself. Thus, ridesharing consumers may come to depend on their ability to access rides over the platform. Lodging providers may come to depend on their relationship with the platform to market their products to consumers. In each case, these long-term relationships can mitigate the concerns for fraud that arise in one-off consumer transactions (Posner 1972).

Effective regulatory oversight also serves the goal of establishing trust among participants in economic transactions. If competition or regulation governs the platform market, the platform itself might be expected to police its participating consumers and providers, risking its own brand, competitive position, or relationship with its regulator if it fails to do so sufficiently. At the current state of development of most platform enterprises, both the regulatory and competitive checks are almost certainly insufficient. As discussed in Part D, the realities of competition in data-driven markets are increasingly understood to lead to a likelihood of persistent market dominance. Even the limited regulation of platform enterprises that exists is most prominently targeted at the protection of workers, rather than competition. Regulatory oversight must complement market incentives to achieve public policy goals including safety and worker and consumer protection.

a. Leap-frogging

Innovations may "leap-frog" intermediate steps, accelerating the pace of growth and change. As an example, one source from 2017 reports broad absorption of mobile-phone technology across sub-Saharan Africa despite substantially lesser electricity access in the same region (*The Economist* 2017 I). This leap-frogging permits developing economies to select technologies that meet their particular needs, based on social, cultural, political, economic, and geographic realities, skipping over generations of technological development (*The Economist* 2017 I, III).

The sharing economy is an innovation in service distribution and asset ownership that may allow societies adopting it to skip steps in the development of transportation, lodging, and other markets, moving more quickly to market structures that meet on-the-ground realities (*The Economist* 2017, III). A firm in a developing economy can offer a substantial service that might otherwise be unattainable in the short term, without waiting for the development of the asset base and supporting technologies over which other economies have a substantial head-start. Barbour and Luiz (2019) identify opportunities for Uber to overcome challenges from insufficient infrastructure and high transaction costs. Their research finds that Uber has created a transportation alternative that had not previously existed in Africa.

One feature of sharing-economy platforms is their universality. By limiting its ambition to a matching function, a sharing-economy platform can serve the sector that is needed for each different economy. *The Economist* magazine's 2017 report on development in sub-Saharan Africa highlighted localized or regional sharing-economy platforms including Moovr, which matches vehicle owners with consumers needing to move cows, and Flare, an ambulance dispatch service in Nairobi, Kenya, which lacked a centralized dispatch service (*The Economist* 2017 III).

C. Disrupting regulated industries

Some descriptions of the sharing economy treat its disruptive nature as a feature rather than a bug (Anderson & Huffman 2017, Huffman 2019). As the concept of disruption is used in economic literature, anachronistic business models may be preserved by regulation or other barriers which prevent innovative change. It is in these markets, including ridesharing (with anachronistic taxi regulation) and task-sharing (with hard-to-justify licensing restrictions on service providers) that the sharing economy is most likely to emerge and to succeed.

1. Regulation of sharing-economy platforms

A sharing-economy platform can itself serve a regulatory role, ensuring that participants on both the provider side and the consumer side have incentives to perform their parts of the transaction to advance preferred outcomes. The platform may then be controlled through competition. Alternatively, governments might regulate the platform to maintain public control over the industry. However, regulators need to ensure that their oversight does not undermine enterprise sustainability (e.g. Vandershcuren & Baufeldt 2017, Section 3).

Regulatory structures raise concerns for corruption, regulatory capture, and anachronistic historical goals that may undermine economic activity and growth. For example, much reporting has been done on the growth of the price of taxicab medallions in New York City, a bubble that burst with the introduction of ridesharing (Rosenthal, NY Times, 2019; Lowenstein, *Washington Post,* 2019). The allocation of medallions has itself been seen as corrupt, with favoured political insiders gaining taxicab rights that could then be leased to independent contractor drivers. The effect of medallion-controlled taxi services in major cities across the United States has been to drastically limit supply, remove incentives for quality increases, and raise costs to consumers, while little or none of the benefit flowing to operators (Horwitz & Cumming, Slate, 2012).

Long before the modern sharing economy was conceived, the United States Federal Trade Commission (FTC) criticized taxicab regulation in the United States, observing that "taxi regulations have been designed to protect public transit systems and existing taxi firms from competition" rather than "concern for market failure and achievement of an efficient resource allocation". (FTC, 1984: 6–7). Other identified harms included fares that disproportionately burdened lower-income consumers and restricted access to the market by less skilled workers (FTC, 1984: 7).

The United States experience with taxicab medallions is not unique. Though a different industry entirely, social-networking platform Facebook speaks of the need for regulation of Internet services including social networking (Zuckerberg 2019). Facebook can be expected to exert substantial influence on any regulations adopted to govern its business, which will have the perverse effect of cementing its dominance in social networking (e.g. Wu 2011). One author notes "ample evidence that powerful interest groups, such as taxi medallion owners and financiers, historically have distorted local taxi regulation for their benefit" (Wyman 2017: 20). Regulation keyed to the specifics of pre-sharing-economy industry risks preventing innovative change brought about by competition within the industry, which, evidence suggests, can make (historical) taxi firms more efficient where there is competition from ridesharing firms (Wyman 2017: 25–26).

2. Private markets are good but not panaceas

The concerns with regulation presented above may not be unique to government control. Private markets can also produce inequality and insider preferencing. One summary of studies on inequality concerns based on data from the United States shows that suppliers from minority backgrounds earn less and consumers with minority backgrounds find it harder to obtain services (Schorr & Attwood-Charles 2018). Market failures may prevent competitive results and fail to account for negative externalities.

External benefits are often used to justify regulation. One article identifies congestion, road collisions, and air pollution as "the three most significant externalities" of transport systems including that in Cape Town, South Africa (Vanderschuren & Baufeldt 2017). Ridesharing enterprises are subject to such externalities in the absence of effective oversight. But ridesharing may provide substantial improvements relative to an alternative world of individual private ownership of assets such as cars. Evidence gathered by Vanderschuren & Baufeldt (2017) shows that consumer preferences for ridesharing in South Africa makes it more likely than public transport to displace private car ownership. A similar argument was made in a study of the Nebengers ridesharing enterprise in Jakarta, Indonesia, noting both the problems of congestion and low-quality public transportation (Asirin & Azhari 2018).

a. Improvements in market access for consumers, workers and women

There is also evidence of improvements in market access in industries where sharing-economy

enterprises are succeeding. On the consumer side of the market, sharing-economy enterprises increase options and affordability for consumers (Asirin & Azhari 2018; Vanderschuren & Baufeldt 2017). This may go as far as offering a realistic or feasible transport option for previously "stranded" consumers, "filling the transport demand that was previously not served or not served well". Similar observations emerge regarding consumer benefits in the Philippines and Indonesia (Yuana, Sengers, Boon, & Raven 2017), and in the United States (Tom Lam, Liu & Hui 2017). Better transport opportunities for consumers support employment in other markets, enabling workers to reach employment that was previously inaccessible (Barbour & Luiz 2019). A substantial report commissioned by the International Finance Corporation (IFC) of the World Bank Group concludes that women as consumers of ridesharing benefit from increased economic opportunity and independence (IFC 2018).

A second market access improvement relates to workers. Entering and exiting the sharing-economy workforce is nearly barrier-free. As a result, barriers to workforce participation, whether legally imposed or de facto, are mitigated. Research by Barbour and Luiz describes Uber "as a source of economic empowerment . . ., creating employment options in countries with very high unemployment rates and few options" (2019: 42–43). An extension of this market access benefit is Uber's support for providing access to bank loans to "unbanked" drivers in Africa, who lacked proof of creditworthiness typically required for a car loan (Id: 45-46).

One substantial report by the IFC studied the impacts on access to markets for women in particular. The report found that "[r]ide-hailing apps reduce barriers to entry for women to work as drivers . . . and, in many cases, boost women's average incomes", and "[s]ome women drivers use ride-hailing income and contacts to support other entrepreneurial activities". Not all of the report's conclusions were optimistic: One finding was that "social norms limit the extent to which women participate in ride-hailing as drivers". In addition, market exclusion cannot be remedied if women remain excluded from financial and digital access, which are prerequisites to participation in ridesharing as consumers or drivers (IFC 2018).

Workers facing discrimination in other job markets, including students and retirees, may gain similar market access benefits (Eisenmeier 2018). Increased opportunity for the less well-off is another frequently observed feature. Eisenmeier (2018) notes that driving for Uber is more remunerative than the low minimum wage jobs in Mexico City and that the assets used in providing sharing services make up a greater portion of the wealth of the less well-off than they do for the wealthy (McGinnis 2018).

3. Where is value captured?

Questions exist about where the value is captured in sharing-economy enterprises. Strong evidence of welfare benefits from reduced cost and increased availability of services, increased opportunity for entrepreneurial activity, reduced transaction costs, and positive externalities spilling over across economies, give reason to believe substantial value is being captured. Whether it accrues to the consumers, entrepreneurs, and local economies where the enterprise operates, or accrues to the private party platform operator, is unclear.

Reports point to a greater use of services in ridesharing and home-sharing markets than would be the case in the absence of sharing-economy enterprises. Such voluntary transactions on the face of it should provide benefits both to service-providers and to consumers. However, it is also possible that significant value is extracted by the platform operator. Substantial critical reporting suggests that the benefits flowing to the workers may not sufficiently reflect the value produced by the transaction, with low returns relative to labour and capital investment (e.g. Codagnone, Biadie, & Abadie 2016 at 33). One corrective is the advent of "platform cooperatives" that reserve a greater portion of the value created for consumers and workers, although their long-term success is as yet unknown. As one example, start-up Juno, competing on a small scale in New York City, took a 10 per cent commission on matches (compared with 20 per cent or more for Uber) and permitted drivers to become employees (Shareable 2016). Juno closed after three years of operation.

Lower prices and greater availability of services may suggest substantial value gained by consumers from sharing-economy enterprises. However, in at least one important measure of quality – consumer safety – reports identify possible shortcomings (e.g. Uber 2020; OECD 2018). Uber's United States Safety Report, while specific to the United States market, is

admirable in its forthright collection and dissemination of data on motor vehicle fatalities, physical assaults, and sexual assaults, and reflects areas for potential improvement. Fatalities involving Uber trips are substantially lower than the United States national average. The study reports more than 3,000 instances of sexual assault across a handful of categories – a number that appears small relative to the number of trips taken, but is large in absolute terms (Uber 2020).

4. The sharing economy may subvert the benefits of regulation

The sharing economy has in many cases succeeded where regulation has imposed costs on the existing industry. In those cases the sharing-economy enterprise was able to "fly under the radar" with a limited local footprint. Early concerns identified tax avoidance and other cost savings as unfair advantages for sharing-economy enterprises. Uber and Airbnb have been particularly identified as bad actors. In very recent years there is some reason to believe that this is changing. Airbnb has reached limited agreements with some governments to collect occupancy taxes and to reduce the number of days lodgings are rented in cities with restrictions on short-term rentals. Uber has reached agreements with governments and obtained licences to operate in jurisdictions as diverse as New York City, the Canadian Province of Quebec, and Bangladesh (e.g. *The Daily Star*, 2018; *The Daily News*, 2019; CTV News, 2019).

a. Safety issues and other rationales for regulation

Taxi regulation in general might be said to address what economists call the problem of a "lemons equilibrium", in which asymmetric information produces a market failure with an intractable gap between supply and demand (Akerloff 1970). Not knowing enough about the safety, reliability, or quality of a taxicab offering (or conversely a taxicab rider), and with transactions being one-time exchanges, consumers and drivers can be expected to differently value their participation in the market. Drivers will demand a high price to take the risk that a passenger is safe and will pay the bill. Passengers will only pay a low price because of not knowing whether a driver and the car are safe and reliable. The same can be said of housing rentals. As three authors note with regard to taxi regulation in the United States market, "[t]he traditional solution, therefore, was to have the government pre-certify the taxicab company, its drivers, and its cars, and then govern – in minute detail – the day-to-day operations of the business". (Farren, Koopman & Mitchell 2016).

Other market failures that have been identified in taxi services include congestion, pollution, time waste from waiting, and effects on mass-transit pricing. The United States Federal Trade Commission produced a lengthy economic study of taxicab regulation in the United States, concluding that the identified market failures were largely illusory and mitigated by increased ease of entry and disclosure requirements. Price ceilings were also considered as less intrusive interventions for market failures related to consumers' inabilities to predict and negotiate prices (Frankena & Pautler 1984). A more recent analysis by Wyman identified "five pillars of taxi regulation", including limits on the number of taxis operating in a locality; regulating fares; health and safety regulation; protections for drivers, such as health or injury compensation; and equal access requirements (Wyman 2018).

In housing, the sharing economy may remove housing stock from other uses. Observers have criticized Airbnb for encouraging owners with greater access to capital to buy housing stock and make it available as short-term rentals for vacationers, both bidding up the price of housing in a particular area and eliminating housing that might otherwise be available for others. Occupancy taxes on innkeepers can help to balance the economic incentives away from rentals for tourism purposes and in favour of use by local residents. As of September 2020, Airbnb collects taxes under agreement with respective governments in only 14 countries worldwide. Commentators have observed other externalities from home-sharing including traffic, noise, and a transient population (Espinosa 2016). The transient nature of the home-sharing population can make enforcement of laws or norms that ordinarily control these nuisances difficult or impossible (Id.). In recent years, Airbnb has increasingly cooperated with governments in markets including London and Amsterdam, enforcing local limits on the number of days per year that an apartment may be used for short-term rentals (*The Guardian* 2016).

The most frequently identified legitimate basis for regulation in sectors influenced by the sharing

economy is that for safety. Safety concerns underlie existing regulatory frameworks in sectors disrupted by the sharing economy. One detailed analysis of the growth of hotel regulation in the United States explains how a series of hotel fires, which caused hundreds of deaths in total during the year 1946, led to substantial strengthening of fire codes and architectural rules to alleviate these concerns (Steffen 2009). Safety concerns are a classic reason for market failure through information asymmetry, with providers having better information about physical assets and operator skill than do consumers. Similar to hotel regulation, taxicab regulation has been justified by safety concerns (Frankena & Pautler 1984).

Sharing-economy service providers that are not subject to the same safety regulations as traditional service providers might initially be expected to experience greater and more frequent safety problems. The City of London in late 2019 renewed a ban on the Uber ride-hailing service based on evidence that drivers on the app used false identities (Feiker-Ahalt 2020). Uber has since reached agreements to regain its operating licence. Data have generally not been available on the relative safety of sharing-economy and other services, and reactions to safety concerns in home-sharing or ridesharing have been based on anecdotes that frequently are not tested for accuracy. A recent exception, Uber's 2020 safety report, found deaths in Uber rides at approximately 50 per cent of the overall road fatality rate. Other categories of safety, including non-accidental death and sexual assault, were not measured against non-ridesharing comparators (Uber 2020).

b. Ratings seem unlikely to fill the regulatory gap

One of the defining features of sharing-economy enterprises is the "ratings" function, permitting users to evaluate their contracting counterparts and their experience using the service. For example, riders rate drivers on the basis of factors including safety, friendliness, and the quality of the vehicle; users of home-sharing services rate hosts on bases including the quality of the accommodation, the accuracy of the advertisement, and the quality of communications. Ratings may fulfil the essential trust function that enables strangers to contract in environments, such as automobiles and homes, that might otherwise be cause for mistrust or fear (Frenken & Schor 2017).

Anecdotal experience suggests that the rating systems are effective at enforcing observable conditions like cleanliness and friendliness. It is less likely that ratings can be effective at reporting non-observable characteristics, such as safety. Studies report that consumer ratings suffer from another flaw: they are mainly positive, following an apparent norm of assigning four or five stars to the service (Pettersen 2017).

D. The sharing economy and competition issues

1. Market definition problems

The first step in any antitrust analysis of sharing-economy enterprises will be that of market definition. The enterprise, as that concept is used here and in prior scholarship, is comprised of a functionally infinite number of suppliers, a matching service (platform), and a seeming infinity of transactions among suppliers and consumers. Courts and commentators have struggled with whether the market is best understood to be (i) the service in which the enterprise operates (e.g. ridesharing enterprises in the taxi market); (ii) a narrower market specific to the sharing economy nature of the enterprise (e.g. a market for app-based ridesharing);[1] or (iii) a market for matching suppliers with consumers (Huffman 2020).

a. Platform market

The correct answer, for most antitrust analyses, is to treat the enterprise as straddling two markets – one for services and one for matching. This is most consistent with the nature of the sharing-economy enterprise (defined further in section D.2) and reflective of the fact that any competitor will need to participate at sufficient scale in both markets.

The matching market is populated by the sharing-economy platforms, and in most jurisdictions is likely to be oligopolistic or monopolistic. The matching market has natural monopoly characteristics, with high up-front costs (developing the app, developing an installed user base) and lower marginal costs (selling the app after achieving market penetration). The matching market also exhibits both direct and

[1] *Meyer v. Kalanick*, 174 F. Supp. 3d 817, 821 (S.D.N.Y. 2016).

indirect network effects, whereby increased use of an app increases its value to all users, making it more likely that a new user will opt for the existing app rather than a new entrant. The matching market is also the market in which entry barriers are greatest because of the need to enter at scale to compete against substantial positive network externalities enjoyed by existing firms (Rochet & Tirole 2004; Shapiro & Varian 1999: 173–226).

b. Services market

A pure services market will be populated by sharing-economy enterprises as well as traditional firms and even in some cases individual entrepreneurs. Thus, a sharing-economy enterprise in a ridesharing market competes with taxis, while a sharing-economy enterprise in a lodging market competes with hotels. For example, the Supreme Court of India has defined the relevant market for cases against Uber to be that for "radio taxi services", a market that includes platform-based offerings such as Uber, as well as more traditional offerings that are likewise dispatched in response to calls (as opposed to street-hails).[2]

The European Court of Justice in 2017 issued a preliminary ruling holding that Uber provided transport services, rather than information services, allowing individual European Union member states to regulate Uber as a taxi operator (as distinct from council-level regulation as an information service provider).[3] The result of this ruling has been to allow European Union member states to apply their individual taxi regulation schema to Uber, with a patchwork of results including some outright prohibitions in countries including Denmark and Hungary.

How to describe the services market is a more complicated question, depending on whether the enterprise is treated as a single entity or as a contract relationship among diffuse suppliers and the platform. If the enterprise is an entity, it may well have substantial market share, approaching or exceeding the 50 per cent threshold many jurisdictions recognize as establishing "dominance". If, in contrast, the enterprise is a set of contract relationship among individual competitors, who are solo entrepreneurs in a massively diffuse market for, for example, transportation services, competition law issues will relate to agreements among the competitors (Anderson & Huffman 2017; see Russo & Stasi 2016).

2. Structure of the firm

Competition law frequently favours intra-firm conduct because it is easy to coordinate and to manage efficiently, with consequent benefits to consumers. Extra-firm contracting offers less central control and reduces efficiencies, such that coordination is more likely to result in consumer harm. In a modern platform industry, however, extra-firm contracts can be concluded as efficiently as can intra-firm contracts in traditional industry structures, with similarly substantial coordination of operations among contracting parties (Anderson & Huffman, 2017: 888–89).

Anderson and Huffman (2017) contend that by reducing search and transaction costs, the sharing economy "enable[s] transactions that could not occur in a pre-Internet economy". The central innovation in platform-based contracting is to eliminate the transaction costs that previously made one-off contracts impossible. The result is that nearly infinitely diffuse competitors – in the case of ridesharing, both drivers (competing for customers) and passengers (competing for rides) – can centralize their operations to achieve efficiencies of scale, while competing in other aspects of business. These areas of remaining competition include "matters such as where to operate, what parts of the day to offer services, and … when to service or replace the vehicles" (Anderson & Huffman 2017: 882–84).

The sharing economy also represents a unique enterprise structure that challenges competition law systems that seek to prohibit agreements by competitors without prohibiting agreements taking place within the firm. Under the current state of law in most jurisdictions, competition law draws a binary categorization that can mean the difference between liability based on an anticompetitive agreement, or immunity if a single entity (Anderson & Huffman 2017: 917). The binary distinction breaks down when considering that integration among participants is a matter of degree. An enterprise structured with sufficient integration to achieve single firm efficiencies should gain the advantages of single firm status. In contrast, an enterprise sufficiently disintegrated to prevent any efficiencies from being realized should be treated as a set of agreements among competitors (Id: 921–22).

[2] Uber India Systems Pvt. Ltd v Competition Commission of India, Civil Appeal No. 641 of 2017.

[3] Asociación Profesional Elite Taxi v Uber Systems Spain SL, ECJ Case C-434/15 (20 Dec. 2017).

3. Monopolization or abuse of dominance

It has been commonly observed that Uber quickly acquires market share in locations where it operates. Casual observation of many of these locations suggests Uber might be dominant, or close to achieving monopoly. However, courts that have considered monopolization or abuse of dominance claims have generally been unwilling to find Uber to be a dominant firm. Explanations may include the definition of the relevant market in which a sharing-economy firm operates; and the nature of the sharing-economy enterprise.

In markets defined narrowly to include only sharing-economy enterprises, the larger enterprises are likely to be considered dominant or monopolies. A federal trial court in the United States city of San Francisco accepted this narrower market definition in January 2020, though it dismissed the monopolization claim brought against Uber by defunct rival Sidecar on other bases.[4] In contrast, a local transport service market that includes taxicabs, public transport, and rideshare firms is unlikely to be dominated by the sharing-economy enterprise.[5] Studies of switching behaviour between public transport, traditional taxicabs, and ridesharing enterprises support the broader market definition. The Competition Commission of India has pursued a market definition including "radio taxi services", which included not only sharing-economy ride-hailing enterprises but also traditional taxicabs, in a particular geographic region, which the Supreme Court of India has approved.[6]

Another factor to consider is enterprise structure. Sharing-economy firms have almost universally taken the position that they are service providers offering services including matching, payments, and ratings aggregation, to allow transactions between sole entrepreneur suppliers and individual consumers. Commentators have observed that the possibility of treating a sharing-economy enterprise as "dominant" within a market for the services provided – for example, ridesharing, home sharing, or task services – seems logically to turn on the treatment of the suppliers in the enterprise as employees of the platform. If suppliers are employees, that gives the platform a degree of control over their work sufficient to enable the platform to exercise a position of dominance. By contrast, if suppliers are independent contractors, a platform's ability to exercise dominance is dramatically reduced, because suppliers choose whether they will or will not provide services and may even compete against the platform (Anderson & Huffman 2017).

a. Employment status

The employment status of workers in sharing-economy enterprises remains broadly unresolved. Several lawsuits have produced varying results and particular jurisdictions have restricted or prohibited Uber on the basis of local labour laws. Across Europe, the trend has been to identify Uber as a provider of transportation services akin to a taxi company, rather than as a technical services company, in contrast with the treatment of Airbnb as a technical platform. As a provider of transportation, Uber is more easily treated as employing the drivers operating under its brand. For example, in March 2020 the French Court of Cassation concluded that Uber's degree of control over drivers met the "employment" definition under French law. Despite a presumption of no employment contract, proof of a "relationship of permanent legal subordination with regard to the principal" would overcome that presumption. The "relationship of legal subordination is characterized by the performance of a job under the authority of an employer who has the power to give orders and instructions, to oversee performance thereof, and to sanction the subordinate for any breaches". Uber's unilateral determination of the terms and conditions of doing the job of providing ridesharing services, together with mechanisms to sanction drivers for identified misconduct, met that requirement.[7] Courts across multiple Swiss cantons have treated drivers as employees of Uber with regard to "social charges" as well as rights to contest termination decisions (Uber Ban, 1 Nov. 2019; Swiss Court, 6 May 2019; Uber accepts Swiss court decision, 7 Dec. 2020; UberPop driver wins, 5 May 2019).[8]

4 *E.g. SC Innovations, Inc. v. Uber Techs., Inc.*, 434 F. Supp. 3d 782, 787-88 (N.D. Cal. 2020).

5 *Philadelphia Taxi Ass'n v. Uber Techs.,* 886 F.3d 332 (3d Cir. 2018).

6 *Uber India Pvt. Ltd. V. CCI*, Case No. 2103/2017, S. Ct. India Sept. 3, 2019.

7 Cour de Cassation, Chambre sociale, Appeal No. S 19-13.316, Ruling n. 374, 4 March 2020.

8 https://www.swissinfo.ch/eng/business/uber-accepts-swiss-court-decision-on-employee/46208314

In the United States, California Assembly Bill 5 required that "a person providing labor or services for remuneration shall be considered an employee rather than an independent contractor unless the hiring entity demonstrates that the person is free from the control and direction of the hiring entity in connection with the performance of the work, the person performs work that is outside the usual course of the hiring entity's business, and the person is customarily engaged in an independently established trade, occupation, or business".[9] The California Attorney General achieved an injunction requiring Uber and Lyft to comply with the law.[10] In November 2020, California voters amended the law in Proposition 22, defining app-based drivers as independent contractors and also requiring the adoption of labour and wage policies to protect drivers (Schmidt-Kessen et al. 2021: 25).

Despite these examples in the context of ridesharing, regulators broadly treat sharing-economy suppliers as independent contractors. This is the position taken by the United States National Labor Relations Board (NLRB), which has enforcement authority at the federal level in the United States. According to that agency, the "common-law agency test" leads to the conclusion "that UberX and UberBLACK drivers [are] independent contractors". (NLRB General Counsel, Advice Memorandum 2019: 3). In jurisdictions where the independent contractor approach is followed, sharing-economy firms are unlikely to be treated as having dominance in any service markets in which they operate.

4. Cartelization problems

If sharing-economy providers are not employees, their multitude of largely uniform contracts with consumers arranged over the platform represents a set of agreements subject to competition law. On the one hand, these agreements established according to a common algorithm represent a hub-and-spoke conspiracy, with the platform as the hub, that would be treated as a large-scale horizontal conspiracy on competitively sensitive matters such as price, service markets, and output, perhaps subject to automatic condemnation as restrictions by object or cartel agreements. On the other hand, the apparent efficiency benefits of the sharing-economy enterprises suggest that they should be permitted (Anderson & Huffman 2017).

A related cartelization issue is the concern that sharing-economy workers, such as rideshare drivers, would be treated as cartelists if they tried to unionize. The default approach under competition law in a wide variety of jurisdictions would treat such a union as a price-fixing agreement among workers (Anderson & Huffman 2021: 15–19). In the United States city of Seattle, the local government attempted to pass an ordinance requiring rideshare drivers to bargain collectively, but after an antitrust challenge by Uber and Lyft, withdrew the ordinance (Schmidt-Kessen et al. 2021: 34). Article 101, TFEU, would be interpreted similarly to the United States Sherman Act in this regard (Id: 12–13). In 2020 and 2021, the European Commission began to consider and sought comments on regulations that are meant to create opportunities for collective bargaining by sharing economy workers, introducing an exception to prohibition under competition law (Inception Impact Assessment, 2021).

a. Hub-and-spoke agreements

In *Interstate Circuit, Inc. v. United States*, a 1939 case from the United States Supreme Court that has been broadly cited in the development of rules governing hub-and-spoke conspiracies in competition law around the globe, the court affirmed the conclusion that a cinema theatre operator's reaching individual agreements with each of several film distributors with regard to the price they would charge represented a hub-and-spoke conspiracy. The evidence established a mutual understanding among the competing distributors that sufficed to constitute a horizontal conspiracy among them. This holding underlies a substantial body of modern hub-and-spoke conspiracy law.[11]

Anderson & Huffman have considered the application of the theory of hub-and-spoke conspiracy to sharing-economy enterprises (Anderson & Huffman 2017: 900–03). In the context of ridesharing, the individual drivers understand that the platform terms of service, including the pricing algorithm, is applied to them equally, a condition *Interstate Circuit* imposes for finding a hub-and-spoke conspiracy. However, treating ridesharing as a hub-and-spoke arrangement would treat individual drivers as members of a cartel, subject to severe sanctions in most jurisdictions, on the basis of their engaging in conduct that to them is more akin to an employment relationship. Anderson &

[9] California Assembly Bill 5, 18 Sept. 2019.

[10] *People of the State of California v. Uber Tech., Inc. & Lyft, Inc.*, No. CGC-20-584402 (Ca. Sup. Ct. Aug. 10, 2020) (injunction order).

[11] *Interstate Circuit, Inc. v. United States*, 306 U.S. 208, 222 (1939).

Huffman (2017) thus prescribe a less strict application of the law in this context.

In the context of lodging and task work, the hub-and-spoke conspiracy argument is ill-suited. Unlike in ridesharing, providers frequently do not accept participation in a pricing algorithm that ensures uniformity; transactions are not commodified in nature and instead reflect individual offerings specific to the time, location, and services provided; and individualized negotiations are the norm. There is a lack of the kind of competitor communication through a hub that seems to exist in a commodity service like ridesharing. To the extent that it does exist, it relates to topics like payment methods, cancellation fees, refund terms, and insurance, rather than to competitively sensitive information like price, output, and quality.

b. Standards for analysing horizontal agreements

Even where a sharing-economy enterprise represents an agreement among competitors on competitively sensitive topics including price, output, quality, and other terms of service, it is almost certainly incorrect that condemning the arrangement as a cartel is the best approach. Anderson & Huffman provide an extensive explanation of the appropriate treatment of a horizontal agreement among sharing-economy suppliers, effectuated through the platform as the hub of the agreement. That analysis is couched in terms of United States-style antitrust, with a conclusion that in the normal case a "quick look rule of reason" analysis is warranted (Anderson & Huffman 2017). However, the core of the analysis – that courts or regulators should entertain the efficiency justifications for the agreement and not summarily condemn it because it meets the basic definition of a price fix or output restriction – is able to be applied in any jurisdiction with a competition law scheme.

5. Competition issues in the labour market

The labour market for ridesharing presents competition law issues in two primary ways. On the one hand, the workers are competitors in a sharing-economy marketplace. If they coordinate their activity, they can exert monopoly power vis-à-vis the platform, whether it is Airbnb, Uber, or others, increasing both the price and non-price benefits they receive for their work. On the other hand, the platform may frequently have substantial monopsony power, enabling it to negotiate the price of labour below the competitive equilibrium. These factors impact both labour and consumer markets and deserve attention as a matter of both competition law and a particular jurisdiction's labour protection regime.

In some ways labour markets are no different from any input market. Workers' respective choices whether to enter the market and how much of their time they devote to services reflects individual trade-offs between working in the particular market and alternative uses of time and talent. When charted on an economist's price-quantity graph, the aggregate output decisions reflect an upward-sloping supply curve: at higher price points, more labour is supplied to the market, and at lower price points, less labour is supplied. In a labour market defined this way, increases in wages translate to increases in output. That, in turn, leads to increases in production of the service that depends on this labour, whether transit, lodging, task-work, or otherwise, which benefits the consumer market. In this way, the labour market and the consumption market are aligned rather than in competition with each other. In real terms, in a sharing economy marketplace, higher payments to workers can be expected to lead to increased services at lower prices to consumers, with the platform bearing the cost (Anderson & Huffman 2021, collecting sources).

Empirical studies of subsistence markets demonstrate the opposite dynamic. At higher price points labour is withdrawn and at lower price points more labour is supplied, producing a downward sloping supply curve for labour. The intuitive explanation for this phenomenon is that at low enough wages, workers will continue to work as much as is required to cover their needs, and as wage rates rise marginally they will reach that point more quickly. At the low wage rates hypothesis, the market is unlikely to experience new entry with marginal wage increases. In these markets, workers and consumers are in competition for surplus. Increases in wage rates both reduce the supply of labour and increase the costs of production, leading to cost increases and output reduction in the consumer market. In real terms, in a sharing economy marketplace, higher payments to workers are likely to reduce services to consumers and impose a higher cost for those services. However, given the assumption of subsistence-level wages, this market warrants interventions to protect workers regardless (Anderson & Huffman 2021, collecting sources).

Which of the labour markets described here best describes a sharing-economy marketplace is an empirical question and will differ by geography. Certainly, some markets are characterized more by a traditional upward-sloping supply curve for labour, with workers entering the market or increasing their output in response to price increases. This is likely to be the case in a market where workers use existing skills and capital assets – for example, workers already own their cars or their homes – and use them to earn extra money. It is also likely that some markets are characterized more by the downward-sloping supply curve for labour. This is more likely where workers lack alternative income sources (places with high unemployment) and where those workers make investments in their sharing economy work – for example, purchasing an automobile to work as an Uber driver (Anderson & Huffman 2021).

Both markets can be warped by a platform's monopsony power. If there is a single option for workers in a particular sharing economy marketplace, the platform will have the ability and incentive to use its monopsony position to reduce the price it pays for labour inputs. In the circumstance of a market with an upward-sloping supply curve, workers will choose to exit the market or to reduce their level of work in response to lower wages, with consequent harm to consumers from reduced output. The beneficiary of this lower output will be the platform. In contrast, if the monopsonist is faced with a downward-sloping labour supply curve at the relevant price point, perhaps because the workers have all incurred substantial costs to participate in the workforce and need to work long hours to cover costs and necessary earnings, the lower wages will bring more labour into the market. This can be expected to benefit consumers, with lower prices and greater output, as well as the platform itself, at the expense of workers.

How governments should respond depends in part on the nature of the sharing-economy marketplace in question. In a market characterized by an upward-sloping labour supply curve, permitting organization by workers to counteract monopsony power of the platform through a process of collective bargaining is likely to improve outcomes for both workers and for consumers. Countervailing monopoly power from collective bargaining can help return the price of labour to something approaching the competitive equilibrium in the labour market.

In a market characterized by a downward-sloping labour supply curve, collective bargaining is unlikely to be effective both because the threat to withhold labour is insufficient and because increases in wage rates will operate to harm consumers. In such a market, interventions to ensure a sufficient standard of living for workers, which will then make the possibility of collective bargaining a reality, may be appropriate.

E. Conclusion and summary

The sharing economy represents a business model innovation that, outside of the unforeseen Covid pandemic, is succeeding worldwide. Although the early growth took place primarily in the developed world, due to the earlier adoption of relevant technologies, the sharing economy has spread quickly across the globe and has great promise for the developing world, as well. This promise is reflected in the ability to upset or circumvent existing firms or regulatory structures. In addition, the sharing economy allows the sort of leap-frogging that can enable an economy to skip intermediate steps, perhaps avoiding the creation of regulatory structures for industry that may be archaic in 2020.

Broad surveys of the emergence of sharing-economy marketplaces across the globe reflect optimism that their benefits outweigh their costs. The sharing economy offers access to employment in regions where unemployment is high, both by providing employment opportunities and by improving transit options for individuals to access other jobs. Much of the optimism focuses on ridesharing in particular, with the sharing economy offering a better option to what may be unsafe or insufficient public transport. Counterpoints exist, primarily in the developed world, where some jurisdictions have determined that a particular sharing-economy enterprise violates its regulatory policies regarding safety, worker protection, or externalities such as pollution or congestion.

- A regulated marketplace should allow for novel enterprise structures that may not fit in the existing regulatory structure but are nonetheless consistent with its goals.
- Enforcing regulation against a novel enterprise structure is essential if the enterprise's path to profitability is achieved by undermining the legitimate regulatory goals.

- Some areas of regulation, including controlling for externalities and safety concerns that are beyond the expertise of consumers, cannot be reliably served by a sharing-economy enterprise with hard-to-enforce terms of service and consumer ratings.
- Where regulation does not exist, is not evenly enforced, or does not serve legitimate social goals it is possible that the features of the sharing-economy enterprise structure can serve those purposes.
- In this case jurisdictions should engage in appropriate oversight of the sharing-economy enterprise to ensure it implements and enforces terms of service that are consistent with the jurisdiction's goals.

The sharing economy presents real competition concerns. Drawing potentially millions (literally billions in the United States) of transactions into a single hub gives that hub enormous power over a market. These concerns include questions of monopolization or abuse of dominance, exercises of monopsony power in the labour market, and coordination among suppliers in the form of a hub-and-spoke conspiracy. Analysing these concerns requires tackling challenging competition law questions such as the definition of the market in which the enterprise operates and whether the enterprise is a firm – thus, almost certainly dominant – or is a collection of individual entrepreneurs working through the app – thus, possibly a hub-and-spoke conspiracy. Finally, labour market issues also raise competition law concerns, but those intersect with, and may conflict with, worker protection goals.

- Competition law should not ignore the value of the sharing economy to workers, consumers, and economic growth.
- Competition law principles should not use rules of per se illegality but should instead balance the benefits, including those related to innovative enterprise structures.
- Competition law principles should allow for labour protection, including labour organization if the characteristics of the market suggest organization will protect consumers by creating countervailing market power.

In assessing its response to the growth of a sharing-economy enterprise, a jurisdiction should consider costs and benefits and the regulatory gaps in the market concerned. Jurisdictions need to bear in mind that sharing-economy enterprises, like others, are businesses driven by profit maximization, and therefore cannot be expected to serve larger social goals. Jurisdictions also need to identify the situations in which competition does not produce expected outcomes for workers, consumers, and society. By default, the sharing economy has great promise and can even serve social goals historically left to regulation subject to certain limits. Market oversight, appropriate regulation to fill in the gaps, labour protection, and a readiness to engage in competition law enforcement are essential matters for jurisdictions to consider.

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CHAPTER IV: COMPETITION POLICY IN THE DIGITAL ECONOMY: THE SOUTH AFRICAN PERSPECTIVE

Thembalethu Buthelezi and James Hodge

A. Introduction

The world economy is undergoing a period of structural and technological transformation, sometimes described as the "Fourth Industrial Revolution".[1] At the centre of this transformation is the digitalization of economic activity, which is being experienced differently across the globe.[2] The Competition Commission of South Africa (CCSA) along with its counterparts in developing countries, shares concerns arising in the context of competition in the digital economy. Key among these are the threat of global or national digital monopolies due to "winner takes all"-type digital markets, how best to deal with the economic power of the FAAGs (Facebook, Amazon, Apple and Google), and the inadequacy of national competition law and regulation to deal with these threats.[3] However, much debate about these shared concerns has emanated only from developed countries or regions such as the European Union, United States of America, United Kingdom and Australia. This lacuna has the potential to miss important and distinguishing features of developing market economies, which may require inherently broader and more nuanced competition policy and regulation agenda.

Several factors explain this. First, developing economies are smaller and their enforcement resources more constrained. Developing economies' jurisdictional reach is more limited relative to the developed jurisdictions. This hinders these jurisdictions' ability to act decisively against economically powerful digital monopolies, which may have pervasive conduct but limited physical presence in developing economies. Second, many markets in developing economies are highly concentrated, in part a product of history but also as a feature of many developing countries. With reference to South Africa, for much of its history, "product markets and capital ownership have been abnormally concentrated. Some of the high market concentration may be a result of the legacy of historic privileges, and some of it may be due to scale factors. South Africa's constitutional transformation gave high priority to the redressing of the racialized economic order of the past".[4] In addition, recent studies measuring the entry and exit rates of firms in South Africa show that South Africa has low entry and exit rates. This means that new firms are not entering, while incumbents are getting older.[5] This pattern is consistent with a relatively limited market contestability, providing some evidence that barriers to entry may be relatively more significant in South Africa than in comparator countries.

Finally, developing countries face vast inequality and poverty, where the majority are economically excluded.[6] While the digital economy may be a contributor to the further entrenchment of global digital monopolies at the centre of developing markets economies, conversely, the same disruptive force could provide opportunities to enhance inclusion in new and existing markets.

This paper focuses on various aspects of competition policy in South African digital markets. The focus is deliberately on competition policy rather than competition law, as many potential interventions to

1 Schwab K. (2016). The Fourth Industrial Revolution: what it means, how to respond. World Economic Forum (2016). World Economic Forum. 14 Jan 2016. Available at https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/ (accessed 23 June 2021).

2 OECD (2018). Tax challenges arising from digitalisation. Interim report 2018: inclusive framework on BEPS, OECD/G20 base erosion and profit shifting project. OECD Publishing: Paris.

3 McLaughlin D. (2019). Why were Facebook, Amazon, Apple, and Google allowed to get so big? Fortune, 16 March 2019. Available at https://fortune.com/2019/03/16/google-amazon-antitrust-laws. Accessed 16 July 2019.

4 Buthelezi T, Mtani T and Mncube L (2019). The extent of market concentration in South Africa's product markets. *Journal of Antitrust Enforcement* 7(3): 352–364. Available at https://doi.org/10.1093/jaenfo/jnz014

5 Govinda H, Cassim A, Msimango n and Molefe, B (2020). Measuring SME participation and performance in South Africa using administrative tax data. Forthcoming working paper, due for publication.

6 World Bank (2018). *Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities.*

enhance competition lie outside the pure enforcement of the South African Competition Act (1998).[7] Further, the focus on inclusion as part of competition policy is deliberate because South Africa's competition regime has the express objective of increasing participation in the economy by small and medium-sized enterprises (SMEs) and historically disadvantaged persons.[8]

B. The digital landscape in South Africa

1. Access to data services

The transmission of information in digital format, more commonly referred to as "data", allows users to, inter alia, access content or over-the-top services on the Internet, communicate via email and stream or download videos and other content.[9] Data services is the provision of these data to consumers, both business and residential, on fixed lines such as fibre or asymmetric digital subscriber lines (ADSL) or using mobile technology.[10] In South Africa, as in many developing countries, there is still no universal access to broadband. While mobile broadband coverage may be pervasive in a country like South Africa, with close to 100 per cent of the population covered by mobile operators, there is a demand gap as low-income individuals are unable to afford access to data services due the cost of devices and the price of data services offered by the operators. Therefore, currently only 65 per cent of South African households has at least one member that has access to, or used, the Internet either at home, work, place of study or an Internet café. But usage levels are low even for a large portion of those who do have access[11]. Rural access is even lower. While figures show that 60.1 per cent of households in the country use mobile devices to access the Internet, this figure drops to 45.0 per cent in rural areas[12]. Fixed-line access is even lower, with 10.4 per cent of South African households having access to fixed Internet services at home[13], pointing to a supply gap where infrastructure rollout is lacking, particularly in low-income and rural areas.

Mobile networks have grown to become the main vehicle for Internet access in South Africa. As of 31 March 2020, Vodacom's second-generation (2G) network system coverage stood at 99.9 per cent of the population and its third-generation (3G) network system coverage was extended to 99.7 per cent of the population.[14] Coverage of the fourth-generation networks (4G), also known as the Long-Term Evolution (LTE) was estimated at more than 95 per cent of the population.[15] MTN SA[16] also covered almost 100 per cent of the population with its 2G and 3G networks, while in December 2019, its 4G coverage reached 96 per cent of the country's population.[17]

For many end-users, access to data services requires "smartphones", which are capable of gaining access to data services and the Internet. It is reported that 20.4 million people used smartphones in South Africa in 2018, representing roughly 36 per cent of the population. According to the Independent Communications Authority of South Africa (ICASA)'s latest State of the ICT Sector report, smartphone penetration in the country increased from 43.5 per cent in 2016 to 91.2 per cent in 2019.[18] Internet usage figures nationally show that 56.9 per cent (39.6 per cent in rural areas) of households in the country use mobile phones to access the Internet.[19]

7 Competition Act (no. 89 of 1998), as amended.

8 A historically disadvantaged individual is a South African citizen who was disenfranchised during apartheid South Africa, a female or a person with disabilities. See *Viking Pony Africa Pumps (Pty) Ltd t/a Tricom Africa v. Hidro-Tech Systems (Pty) Ltd and City of Cape Town,* CCT 34/10, [2010] ZACC 21 para 25.

9 CCSA (2019). *Data Services Market Inquiry*. Final report. Available at http://www.compcom.co.za/wp-content/uploads/2019/12/DSMI-Non-Confidential-Report-002.pdf

10 Ibid.4

11 Statistics South Africa (2019). *General Household Sur4ey 2018*. Statistical Release P0318 Available at http://www.statssa.gov.za/publications/P0318/P03182017.pdf

12 Statistics South Africa (2018). *General Household Survey 2017*. [Online]. Available at http://www.statssa.gov.za/publications/P0318/P03182017.pdf

13 Statistics South Africa (2018). *General Household Survey 2017*. [Online]. Available at http://www.statssa.gov.za/publications/P0318/P03182017.pdf

14 http4s://www.vodacom.com/pdf/what-we-do/best-technology.pdf

15 Ibid.

16 https://www.mtn.co.za/Pages/About-MTN.aspx?section=1

17 CCSA (2019). *Data Services Market Inquiry*. Final report. Available at http://www.compcom.co.za/wp-content/uploads/2019/12/DSMI-Non-Confidential-Report-002.pdf - http://www.compcom.co.za/wp-content/uploads/2019/12/DSMI-Non-Confidential-Report-002.pdf; https://www.mtn.com/wp-content/uploads/2020/03/MTN-Integrated-report.pdf

18 https://www.icasa.org.za/uploads/files/State-of-the-ICT-Sector-Report-March-2020.pdf

19 Statistics South Africa (2018). *General Household Survey 2017*. [Online]. Available at: http://www.statssa.gov.za/publications/P0318/P03182017.pdf

Irrespective of the trends observed above, access to data services and indeed the digital economy remains highly problematic, as without it there is a real threat of not just economic exclusion, but also exclusion from full participation in society. In terms of mobile data, South Africa has seen a public outcry about data prices and calls for prices to be reduced by the operators. In response to this, a market inquiry was conducted by the CCSA into the price of data services.[20] The market inquiry identified that competition among mobile operators was insufficient, leading to prices being higher than in comparator countries on the African continent as well as in some BRICS[21] counterparts. The market inquiry also identified that pricing structures were anti-poor, with poorer, low-volume consumers having to pay much higher effective per megabyte (MB) prices.

As concluded by the market inquiry, responding to these challenges requires a domestic focus on two aspects: first, a reduction in the price of mobile data services to improve access. Following the market inquiry, CCSA recommended that price decreases, especially for poorer consumers, would be particularly effective in increasing access. Second, the development and rollout of broadband infrastructure to increase access to fixed-line based data services and Internet access.

Even if data prices are reduced, it is apparent that there will always be those too poor to participate extensively in the digital age if private paid access is the only means of access. Therefore, the CCSA has also recommended zero-rating of certain content for public benefit to ensure that citizens have free access to online government services as well as other basic access. The Commission has recommended lifeline data be made available to citizens – a daily free allocation of data to ensure citizens remain connected and integrated into society. This seeks to ensure cheaper access to data services daily for all South Africans and to partially offset the data pricing discrimination against the poor from higher pricing per MB in smaller monthly bundles.

A further recommendation is the rollout of fixed-line infrastructure and the promotion of alternatives to mobile data services. The availability of alternative infrastructure for Internet access such as free public Wi-Fi in lower-income areas will ensure greater inclusion but also reduce the costs incurred through accessing more expensive mobile data services. Other recommendations include investment incentives for Fibre-To-The-Home rollout in low-income and rural areas and towns, and allowing small community networks, and possibly small businesses, in rural areas to access unused mobile spectrum, which will allow for cheaper access to data.

The outcome of these recommendations is likely to be observable only in the coming years, but it is already clear, from a particular developing country perspective, that access to data services cannot be easily assumed nor taken for granted.

2. Overview of digital platforms in South Africa

Despite the high cost of accessing data services, digitalization has already "disrupted" the South African mobile industry and is now beginning to transform a range of other local industries, including healthcare, finance and retail. This development is creating opportunities for innovative services, with consumer engagement and data traffic increasingly focusing on mobile devices and mobile networks.[22] Like in other developing countries, the FAAGs also dominate search and social media in South Africa. For instance, Facebook is by far the biggest social media platform in South Africa, with a penetration rate of 53%. This is followed by LinkedIn (18%), Instagram (9%), Twitter (4%) and Snapchat (3%).[23]

Global giants feature significantly in smartphone usage in South Africa. Most smartphones in South Africa run Google's Android operating system. Samsung remains the most popular smartphone manufacturer, with a market share in terms of sales of 29.9 per cent in the first quarter of 2020.[24] This was followed by Mobicel with 17.7 per cent of sales and Huawei in the number three position with a market share of around

[20] Ibid.

[21] Brazil, Russia, India, China and South Africa.

[22] Nkhahle L. (2018). The digital landscape and transformation in South Africa. Blue Vine Group. Available at https://www.bluevinegroup.co.za/the-digital-landscape-and-transformation-in-south-africa/ (accessed 23 June 2021).

[23] Who Owns Whom (2019) *The Telecommunications Industry and Retail of Devices in South Africa*: Siccodes 75200, 61501a & 62399a. Randburg, South Africa: Duncan Bekker.

[24] Who Owns Whom (2021). *The Telecommunications Industry and Retail of Devices:* Siccode 75200, 61501a & 62399a. Randburg, South Africa: Stephen Timm.

15.9 per cent.[25] Apple had less than 6 per cent share as of the end of 2018.[26]

Online retail is another component of the digital transformation of the economy. Prior to the Covid-19 pandemic, online retail represented a small proportion of all retail sales, while internationally these sales had been increasing significantly in some product categories (such as books, electronic goods and clothing) with online sales growing rapidly overall.[27] From the period 2018-2019, over 55 per cent of regular Internet users reported purchasing a product/service online with 38 per cent of these purchases being transacted via mobile devices. The total number of people purchasing consumer goods via e-commerce increased by 4.2 per cent from 2018-2019.[28]

However, with the advent of the global pandemic leading South African consumers to shy away from brick-and-mortar retail, online retail sales have escalated at an unprecedented rate. Euromonitor anticipated that online sales would double over the course of the pandemic, with Nielsen predicting a 200 per cent growth in online food purchases in particular.[29] Similarly, in a survey conducted by Visa, it was shown that 64 per cent of South Africans made their first online purchase of groceries and 53 per cent made their first online purchase from pharmacies due to the pandemic.[30] South Africa's largest consumer e-commerce platform, takelot.com, achieved a growth in online sales of 88 per cent in the first half of its 2021 financial year.[31]

In terms of cross-border e-commerce, the geographic spread from which online purchases were made in South Africa in 2017 included 84 per cent locally, 27 per cent from the United States of America and about 15 per cent from Europe. The three most popular online shopping categories as indicated by South African consumers who shop online in their survey responses were clothing/apparel (53 per cent of respondents), entertainment/education (digital/downloadable) (51 per cent of respondents) and event tickets (51 per cent of respondents).[32] Other popular product categories in South Africa included electronics and media (accounting for $964.2 million in sales) and furniture and appliances (which generated $553.7 million in sales).[33]

The financial services technology (fintech) sector is growing fast, transforming financial services and disrupting traditional financial methods. Locally, one factor driving fintech is that traditional financial institutions are supporting and adopting these innovations by investing in-house and partnering with start-ups. The traditional financial institutions that are making significant headway in augmenting their business practices with the use of technology include South Africa's four big banks, Standard Bank, ABSA, Nedbank and First National Bank (collectively referred to as the Big Four), as well as Capitec, and Discovery Bank (launched in 2019). The Big Four have embraced fintech as part of their strategic direction for the future primarily through more efficient distribution channels and to compete head-on with disruptors.[34] Capitec's business model is centred on simplicity and affordability, with an increasing focus on out-of-branch transacting, cloud computing, big data and analytics, blockchain, AI, biometrics and quantum computing.[35] Discovery Bank, a recent entrant into the banking space but a giant in medical insurance, is marketing itself as the world's first

Despite the observed digitalization occurring in South Africa, there is limited information capturing this transformation across the entire South African economy. Notwithstanding this, it is clearly observable that there is growth in the South African digital landscape, which is transforming a range of industries, and creating opportunities for innovative services.

25 Ibid.

26 Ibid.

27 Goga S, Paelo, A. and Nyamwena, J. (2019). Online retailing in South Africa: An Overview. *CCRED* working papers 2019. University of Johannesburg. Available at SSRN: https://ssrn.com/abstract=3386008 or http://dx.doi.org/10.2139/ssrn.3386008

28 We Are Social and Hootsuite's digital report on South Africa 2019.

29 Dludla n (2020). South African e-commerce is a COVID-fired market of risk and reward. Reuters. Available at https://www.reuters.com/article/us-health-coronavirus-safrica-ecommerce-idUSKCN24G1A6

30 Ibid.

31 Goldstuck A (2020). SA e-commerce: boom as annual sales day looms. *The Citizen*, 25 November 2020.

32 https://www.bizcommunity.com/Article/196/168/181707.html

33 UNIDO (2017). *National Report on E-Commerce Development in South Africa.*

34 Coetzee J (2018). Strategic implications of Fintech on South African retail banks. *South African Journal of Economic and Management Sciences* 21(1). Available at http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2222-34362018000100068&lng=pt&nrm=iso&tlng=pt

35 Ibid.

C. Shared global challenges regarding competition

The growth in the South African digital landscape that is characterized by Internet use dominated by global search and social media giants, raises common challenges faced by competition authorities across developing countries. The competition authorities have started to question the appropriateness of current competition legislation and regulation to address these challenges. South Africa shares these concerns as its legislative and regulatory systems have often been modelled on those in more mature jurisdictions, some of which are currently working towards regulating digital markets.

For example, in merger control, there is a concern that significant acquisitions of start-up companies may not trigger the usual thresholds for merger notification given that these are typically turnover or asset based. For instance, the Facebook/WhatsApp merger (2014) was not notifiable in South Africa because WhatsApp did not generate any revenue in the country. While South Africa does have the power to investigate small mergers within six months after implementation,[36] these do not trigger mandatory notification to the competition authorities.

In terms of market conduct/abuse of dominance, it is currently the case in South African competition law that the authority bears the onus of demonstrating harm from potentially exclusionary practices. As raised by the expert report for the European Union on competition policy in digital markets, the preferred position may be for a reverse onus in certain circumstances, whereby dominant digital firms should have to demonstrate why certain conduct is net efficiency enhancing and not restrictive of new entry.[37]

Further challenges faced by the CCSA include concerns raised across several sectors that the broader regulatory framework does not always apply to new, disruptive technology. This gives these new digital firms an unfair competitive advantage over regulated incumbents. For instance, traditional metered taxis in South Africa have raised the concern that area restrictions and price regulation applied to their business model is not applied to e-hailing firms such as Uber and Taxify/Bolt, placing the traditional model at a competitive disadvantage. Further, public and free-to-air (FTA) broadcaster licensees are subject to local content requirements that streaming services are not. This disparity threatens to erode the public and FTA advertising revenue base, while favouring Facebook and Google, thus undermining the investment in local content development.

In addition to these shared challenges, the global digital giants pose an even greater enforcement challenge for developing countries because their economies are dwarfed by the valuations of these companies. There is a limited ability to effectively challenge global merger activity that might have a disproportionate effect on the jurisdiction of developing countries, given the relative unimportance of those markets to these firms or the limits of developing countries' jurisdictional reach. There have been instances historically where a global firm threatened to cease servicing South Africa rather than be subject to remedies, with global implications for their business, coming from a comparatively small South African market.[38] Similarly, in cases where the merging parties lack a strong in-country physical presence, such as Internet search and social media platforms, limited regulatory reach makes merger enforcement and competition law enforcement generally, challenging.

Jurisdictional reach is also a challenge for market conduct and abuse of dominance cases as competition authorities may sometimes struggle to hold global entities with limited presence in South Africa accountable. This is especially true where the evidence is located elsewhere. When this happens, the competition authority can face many legal hurdles in securing evidence, or even be barred from collecting it altogether. Limited resources and

[36] In terms of section 11 of the Competition Act 89 of 1998, mergers are categorized into small, intermediate and large based on requisite financial thresholds. In terms of sections 13A and 14A, all intermediate and large mergers require mandatory notification and approval (with or without conditions) with the competition authorities prior to their implementation. In terms of section 13, a small merger does not require mandatory notification with the competition authorities and can be implemented without the statutory approval of the competition authorities. However, the Competition Commission may require notification within six months of implementation.

[37] European Commission DG-Comp (2019). *Competition Policy for the Digital Era*.

[38] Fisher W and Rigamonti C (2005). The South Africa Aids Controversy: A Case Study in Patent Law and Policy. Harvard Law School, Harvard. (Ref: https://cyber.harvard.edu/people/tfisher/South%20Africa.pdf) and Chapter 5 - Standing Up For Our Lives (section27.org.za)

the complexity of competition cases involving digital market players are a further impediment to effective enforcement against abuse of dominance cases in developing countries.

Further, the growth of the digital economy has enabled the rise of business models based on the collection and processing of data. This has culminated in the development of "big data".[39] The ability of firms to collect and process such data for commercial use gives them a competitive advantage over rivals. From a privacy perspective, the accumulation of consumers' personal data may lead to the loss of their privacy, giving rise to consumer harm, particularly when consumers are unaware or ill-informed about the collection and use of their data by firms.

The accumulation and use of data with or without limited consent (as indicated by the Bunderskartellamt Facebook decision[40]), and the privacy of consumers are not the only concerns arising from big digital monopolies. Their pervasiveness across borders along with their potential market power and consumers' dependence on many of these platforms raise similar concerns about jurisdictional reach and enforceability. Privacy regulators in developing countries, where they exist, are resource-constrained and need to balance the right to privacy against global connectivity and trade. Should privacy regulators in developing countries get the balance wrong, businesses may perceive compliance as too stringent and administratively burdensome, which may stifle innovation and cross-border e-commerce to the detriment of consumers. However, the protection of privacy is a big challenge in developing countries, and the exploitation of private information is of greater concern, especially where countries do not have privacy laws and/or the enforcement know-how to provide consumers with meaningful recourse while deterring firms from breaching privacy laws.

[39] Although without common definition, "big data" can be looked at as "large amounts of different types of data, produced at high speed from multiple sources, whose handling and analysis require new and more powerful processors and algorithms…often characterized by the three "V"s – velocity, variety and volume – or the four of them (adding "Value to be extracted)". See Autorité de la Concurrence and Bundeskartellamt (2016). *Competition Law and Data.*

[40] https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2019/07_02_2019_Facebook.html?nn=3591568(accessed 12 February 2021).

D. The way forward for developing countries

1. Facilitating disruption by fostering inclusion

Digital markets have greatly opened the space for entrepreneurs and disruptive entrants. These business models overcome many of the entry and scaling challenges typically faced by small businesses. New consumers can be serviced at little extra cost and cloud computing offers processing power equal to that of large firms. Entrepreneurs in the "old" brick and mortar economy can also now leverage the consumer reach and logistics of online marketplaces. This has real potential benefits in a country like South Africa with highly concentrated markets and self-evident barriers to broader economic participation. Indeed, digital market entrants may even succeed where competition policy has failed.

In South Africa this has been the most obvious in the banking sector, where digital entrants are introducing innovative pricing models, such as no-fee banking services, which has put pressure on the concentrated "bricks and mortar" bank sector to do the same. These digital banks are not constrained by historical entry barriers such as the need for a branch network.

However, we have not seen the same progress in other parts of banking or other markets where the same opportunities exist, such as insurance and healthcare. Given the existing level of concentration, digital start-ups complain that the large incumbent firms remain gatekeepers controlling access to consumers and the vast stores of consumer transactional and behavioural data. These resources could be the basis for new business models which may precipitate new entry in these markets. Consequently, incumbents use their position to either pursue these opportunities alone or enter into partnerships with the aim of appropriating the business or copying it. The result is that incumbents shut out the next generation of entrepreneurs and ensure less disruption to their markets, potentially to the detriment of consumers.

In developing countries, reducing market concentration, whether in the old economy or new digital economy is directly linked to economic inclusion.[41] This applies to individual, firm and national inclusion. In a developing country context, poor households lacking Internet access may be excluded from the benefits of a digital world and local firms may lack the skills and finance to compete in the digital markets and create back-end jobs domestically. In South Africa this would limit the ability of SMEs and firms owned by historically disadvantaged persons to participate in the economy.

One of the ways to foster inclusion in South Africa is universal access to broadband. While mobile broadband coverage may be pervasive in a country like South Africa, there is a demand gap as low-income individuals are unable to afford devices and data costs to access digital services. This lack of access is highly problematic as economic, social and political life shifts online, threatening to exclude even those currently included. For instance, many job or university applications are made online. Participation in democracy requires accessing the political debates, which have increasingly shifted from print to online media. There is thus a real threat of not just economic exclusion, but also exclusion from full participation in society.

Responding to these challenges requires a domestic focus on the development of broadband infrastructure and a reduction in data costs. South Africa has a highly concentrated mobile sector and the CCSA's completed market inquiry covered this and the high data costs.[42] Unfortunately, even if data costs are reduced, it is apparent that there will always be those who are too poor to participate extensively in the digital age if private paid access is the only means of access. Therefore, part of the recommendations in the data market inquiry is the development of free public Wi-Fi in lower-income areas to ensure greater inclusion. However, as free Wi-Fi is not something that can easily be provided, given the inevitable budget constraints of national and local governments in developing economies, a range of funding models are being explored.

One obvious approach is public-private partnerships, whereby access to government facilities and wayleaves constitute the contribution of government, while private firms may offer free Wi-Fi for a limited period or volume in exchange for also holding the opportunity to develop other revenue sources. These may include a premium service or advertising-based models. Further recommendations by the CCSA to facilitate inclusion in digital transformation is the daily lifeline package of free data on all mobile networks. This package seeks to ensure cheaper access to mobile data services daily for all South Africans and to partially offset the data pricing discrimination against the poor from higher pricing per MB in smaller monthly bundles.

Value-sharing approaches to promote digital inclusion in developing countries should also look further. Frequently, the biggest beneficiaries of inclusion are the global search and social media giants whose services are popular and who are effective at monetizing personal data through advertising or other services. Furthermore, the vast profits recorded by global search and social media platforms show that the value of the data provided by online visitors far exceeds the value provided, even if the service is free. These vast gains mean that these global platforms can provide better services to their users. For example, the platforms could take steps in the policing of hate speech and fake news, protection of privacy and service innovations, and also in lowering the overall cost of using digital services, which includes the device and data costs. It seems some of the global giants are considering this with initiatives such as satellite or high-balloon Internet coverage. A digital tax might be another alternative to consider.

2. Facilitating disruption by reducing market concentration

South African competition law and policy seek to ensure that markets are not just competitive but also more inclusive. This is essential to South Africa given the historical systematic economic exclusion which has led to the country having the highest inequality in the world.[43] However, inclusive growth is also a

[41] AI pioneer Andrew Ng ended his speech to an Amazon technology gathering with the following important message: "With the rise of the Internet, we've created tremendous wealth, but we also contributed to wealth inequality. Let's make sure that this time, with the rise of AI, we take everyone along with us." Available at https://www.bbc.com/news/technology-48634676. (accessed 15 July 2019).

[42] CCSA (2019). *Data Services Market Inquiry.* Final report. Available at http://www.compcom.co.za/wp-content/uploads/2019/12/DSMI-Non-Confidential-Report-002.pdf

[43] https://www.imf.org/en/News/Articles/2020/01/29/na012820six-charts-on-south-africas-persistent-and-multi-faceted-inequality (accessed 02 June 2021).

prominent global theme due to widening inequality. In other African jurisdictions, the same concerns are expressed through national development provisions in their competition laws.

Making markets more inclusive not only addresses social imperatives, but also can make markets more competitive and benefit consumers. Most economists see a large and vibrant small business sector as essential in providing dynamism, growth and employment opportunities to an economy. Digital start-ups play the same role, especially in terms of dynamism through innovation. Consumer benefits may manifest themselves in lower prices, but equally important are the benefits from greater choice, and better privacy protection and innovation. Indeed, the open banking initiative in the United Kingdom has seen the most benefits from increased innovation by challengers but also the incumbents that have been forced to innovate more with their own data, which is now also accessible to challengers.

However, there is a distinct risk that the digital age could threaten this inclusion in two ways. First, there is a risk that digital markets are dominated by developed economy global giants exploiting the vast economies of scale and scope that exist. Second, there is also a risk that digital markets become dominated by a few large digital conglomerate firms even if they are domestically owned.

Conglomeration is a clear trend in digital markets, with larger digital platforms rapidly moving into adjacent markets, including producing or providing the products sold on their platforms. This is in stark contrast with the most recent trend of the industrial age, which is to focus on core competencies and abandon conglomeration which was often punished by investors. Various factors are driving this trend. One is the economies of scope associated with data gathered or consumers accessing those platforms, which can then be monetized in various ways. Rather than exchanging this data, firms have sought to exploit it themselves. Amazon's move from online retailing of books to all other products, including its own brands, is a classic case. A second is the enormous resources at their disposal. For example, Amazon invested early in data centres to support the development of its e-commerce activities but then later decided to enter the market for cloud services (through Amazon Web services).[44] The third way that inclusion can be undermined is that the control of consumer access enables platforms to displace those that depend on it. Amazon and Google shopping are examples for commercial goods, but Facebook and Apple do the same with apps.[45] Finally, the observation of global trends indicate that digital conglomerates are much more likely to acquire start-ups than be challenged by them.[46]

Conglomeration is not only a global platform phenomenon. The same economic forces can support local conglomeration. South Africa has its own Internet giant, Naspers, which built its position through acquiring shares in Chinese social networking and gaming firm Tencent early on. Naspers has been building its local e-commerce and digital online platforms, in part through a series of acquisitions. It has also been expanding the product range of such platforms. Furthermore, the gradual expansion of the highly successful South African healthcare insurer Discovery into life insurance, short-term insurance and now banking is a more "old economy" example of how such data and consumer access can be leveraged into adjacent markets.

Conglomeration by global and local digital market firms has the potential to negatively impact inclusion, even if there is sufficient competition among these larger players to maintain price and non-price market outcomes at competitive levels. This is particularly concerning in the South African context, where market concentration levels are already high, and the likely impact of increased conglomeration are heightened barriers to entry for potential entrants since the large digital platforms become "gatekeepers" to access markets.

Therefore, from a competition policy perspective, more needs to be done to ensure that digital markets are also open to domestic start-ups and challengers, and

44 Bourreau M and de Streel *A. (2019). Digital Conglomerates and EU Competition Policy.* CRIDS Namur Digital Institute. Belgium. Available at http://www.crid.be/pdf/public/8377.pdf (accessed 12 February 2021).

45 Khan L (2019). The separation of platforms and commerce. *Columbia Law Review* 119(4).

46 For example, "Google has spent substantial sums acquiring other businesses. Some of these acquisitions may have enabled Google to entrench its position in search and search advertising, including through expanding into related markets which may have been a source of possible rivals to Google's core products in the medium term. This potentially weakens the constraint from dynamic competition. In the period 2004 to 2014, Google is reported to have spent at least US$23 billion buying 145 companies. Source: Australian Competition and Consumer Commission (2019). *Digital Platforms Inquiry*: 74–5. Available at https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf (accessed 12 February 2021).

that global firms share in the rewards that they derive from developing markets. Locally, additional tools will be required to address the threat of conglomeration. For example, merger control needs to be revisited not only for killer acquisitions, which have attracted most attention, but also to combat increased conglomeration through merger creep. Such acquisitions do not necessarily kill a potential competitor, but rather gives the conglomerate platform a foothold in an adjacent market that can be leveraged later.[47]

Merger control also needs to be alert to the removal of a potential entrant of another sort. In a developing country context, there is also a tendency for global platforms to acquire the largest local home-grown platform rather than enter themselves. Such mergers deny consumers the benefit of additional competition and a potentially less concentrated market in the future. In addition, taking a tougher stance on conglomerate strategies, such as self-preferencing, exclusive and most favoured nation agreements, may also be appropriate. In its draft buyer-power enforcement guidelines[48] the CCSA has already highlighted that behaviour such as self-preferencing would be considered as unfair trading practice by dominant online platforms that bring together third-party suppliers and consumers, such as e-commerce platforms.

Developing domestic firms to compete in this space is another area for competition and even industrial policy. Online businesses can sell products globally without a physical presence in the countries they service. Such global reach and costless replication mean that the previous drivers of localized production are frequently left out. For instance, transport costs for raw materials, import tariffs or domestic distribution all provided a rationale for a local presence. That rationale may be missing in many (but not all) future digital markets. As a result, the driving force of innovation and back-end jobs created by these firms may remain in their headquartered country, leading to even greater exclusion of developing countries. Furthermore, global platforms may choose to shift their profits to low-tax jurisdictions – a strategy not necessarily viable for local platforms – that provide these global firms with a significant competitive advantage over local platforms.

If this is to be avoided, then developing countries will need to provide industrial policy incentives for global firms to station operations in their jurisdictions. It will also need to support the development of local digital firms to participate in the digital age, much like the infant industry arguments of old times. It will also require investment in skills and capital financing. This must include the funding of research through universities and will require regulators such as the CCSA to invest in-house talent focused on digitalization of the economy.

Policymakers and regulators in developing countries must also focus their efforts on how to support entrepreneurs to unleash these opportunities and de-concentrate markets. Doing so would directly address the twin objectives of competition policy, namely, more competitive and more inclusive markets. This support may be best achieved through proactively unblocking whatever hindrances remain for these digital entrants, particularly from incumbent firms. Ownership of data and access to consumers or distributional channels are market features that favour large firms purely by dint of their size and incumbency, rather than guaranteed superior product offerings.

3. Data portability and interoperability

Data is seen as a source of significant advantage in the digital age. Data is also the basis for many new and old services. While data portability and interoperability are at the heart of loosening the FAAGs' gatekeeper power, there is also tremendous scope for a general regime on data portability and interoperability to open markets to new innovative businesses, while ensuring privacy and security of personal data. Such a regime may be an effective tool in addressing the market power of existing "brick and mortar" incumbents by reducing barriers to entry, allowing new entrants to disrupt traditional industry and have an impact across all markets. Data is not the only area. The European Union expert report's findings on digital markets around strategies to frustrate new entry deployed by digital firms also resonate to a large extent with existing old economy platforms such as financial services.[49]

[47] South Africa has recently passed amendments which add this dimension to merger control, and it is in digital markets that it might find most expression.

[48] CCSA (2019). *Buyer Power Enforcement Guidelines*. Available at http://www.compcom.co.za/wp-content/uploads/2019/11/CCSA-Draft-Buyer-Power-Guidelines.pdf

[49] European Commission (2019). *Competition Policy for the Digital Era*.

Consideration needs to be given to whether such rule changes should have broader application in markets where incumbents fight digital disruptors.

Another benefit of a proactive approach is that it may well prevent emerging digital markets from becoming concentrated and less inclusive over time. A potential advantage of developing countries is that some of these digital markets are not as well developed, or there is still scope for new entry and market growth as a large part of the population is not yet connected. This means that there is still space to keep these markets competitive and not have the difficult task of either regulating entrenched monopolists or seeking to develop entrants in their presence. After all, if there is one lesson for competition policy from the FAAGs debate, it is that it is extremely hard to address economic power once it is in place, especially for a competition regulator in a developing country.

The European Union expert report on digital markets has suggested a shift in onus for dominant digital firms on certain conduct.[50] However, a developing country competition regulator should also consider whether there are additional rules which could be imposed even on non-dominant digital firms to ensure competitive markets in the future. For example, rules on data interoperability, limitations on most favoured nation or best price clauses, and limits to self-preferencing on digital platforms more generally could be imposed in competition law enforcement regardless of dominance. Limiting large platforms from selling in competition with those that access consumers through them might be another area for consideration.[51]

In undertaking this assessment, the competition regulator would have to weigh the benefits for enforcement (including the resource constraints on the enforcement side) against the potential cost such rules may place on digital businesses. Moving beyond competition policy, this weighing should also consider if there are valid consumer protection reasons for such policies too. For instance, limiting self-supply and/or self-preferencing on platforms may protect consumers from suboptimal options.

[50] European Commission (2019). *Competition Policy for the Digital Era*.

[51] Khan L (2019). The separation of platforms and commerce. *Columbia Law Review* 119(4).

4. Regional and global enforcement cooperation

There is a greater need for coordinated enforcement action and regulation regionally and globally. It is evident that even for larger jurisdictions like the European Union, a cooperative approach provides greater leverage and enforcement resources, and enables common solutions to be found that might result in more consistent regulation of these global firms across jurisdictions. Indeed, the European Union itself has adopted a "single digital market strategy" to realize these benefits for its own citizens and firms within the European Union.[52] Fortunately for the European Union, there exists political and legislative means of doing so, but this is not yet the case for developing countries like South Africa. However, the second phase of negotiations of the African Continental Free Trade Area (AfCFTA) is due to begin, having been delayed by the Covid-19 pandemic, which include negotiations on competition policy.[53] A new work stream on digital trade and the digital economy has already been launched for the second phase of negotiations,[54] which will provide South Africa and other member states the opportunity to develop a common digital market strategy to coordinate enforcement action and regulation to the benefit of the citizens and firms on the continent.

Regional or even continental coordination in the case of Africa is imperative as it will provide more leverage in dealing with issues that may have a regional or continental dimension. These may include merger transactions among digital firms with a stronger

[52] Communication from The Commission to The European Parliament, The Council, The European Economic and Social Committee and The Committee of The Regions: A Digital Single Market Strategy for Europe (Brussels, 6.5.2015 COM (2015) 192 final).

[53] UNCTAD (2020). *African Continental Free Trade Area Phase II Negotiations: A Space for a Competition Protocol?* United Nations Publication. New York and Geneva. Available at: https://unctad.org/webflyer/african-continental-free-trade-area-phase-ii-negotiations-space-competition-protocol

[54] United Nations Economic and Social Council (2021). Economic Commission for Africa Committee of Experts of the Conference of African Ministers of Finance, Planning and Economic Development Report on the first session of the Committee on Private Sector Development, Regional Integration, Trade, Infrastructure, Industry and Technology https://www.uneca.org/sites/default/files/com/2021/E2100144-English-CoM%2021-Report%20on%20the%20first%20session%20of%20the%20Committee%20on%20Private%20Sector%20Development%2C%20Regional%20Integration%2C%20Trade%2C%20Infrastructure%2C%20Industry%20and%20Technology%20%282%29.pdf

regional presence than their position globally, or where there is a shared developmental objective. Much like the European Union, stronger regional or continental coordination would also permit greater consistency in approach across Africa, which might provide benefits to global companies and African ones seeking scale from cross-border expansion.

Coordination might also resolve some of the resource constraints that would face individual authorities in dealing with these matters. The current regional or continental bodies operating in Africa (e.g. COMESA or SADC) may not readily have the required legal instruments to allow for regional enforcement such as there may be with a supranational competition regulator on the continent. While there is some progress observed in establishing the AfCFTA, this does not preclude initiatives by domestic competition regulators to use the platform provided by the AfCFTA to consider mechanisms that would deepen cooperation on the continent with particular focus on the impact of digitalization.

Some of these mechanisms include the forthcoming negotiation and implementation of the AfCFTA Protocol on competition in the second phase of negotiations, the negotiation and implementation of the Protocol on e-commerce in the third phase of negotiations and the African Digital Trade and Digital Economy Strategy.[55] Consumer confidence is important in stimulating business-to-consumer e-commerce, yet the incidence of consumer protection in Africa is particularly low compared to the rest of the world.[56] As such, in order to drive digital-based markets and e-commerce, consumer protection needs to be at the forefront of discussions on competition policy under AfCFTA.[57] In addition, a focus needs to be placed on competition and investment in ICT and technology related infrastructure, as well as social policies facilitating education in these spheres, to build and expand basic infrastructure for the digital leap.[58]

In February 2020, the African Union Heads of State and Government Assembly included e-commerce into the pan-African free trade agreement to be integrated in the third phase of negotiations and to develop the African Digital Trade and Digital Economy Strategy.[59] In the meantime, the African Union has urged member States to review their bilateral agreements in preparation, such that

> "Africa is able to negotiate and implement an AfCFTA Protocol on e-Commerce where Africa has full authority on all aspects of e-commerce such as data and products being traded under e-commerce, and to promote the emergence of African owned e-Commerce platforms at national, regional and continental levels as part of our preparations for the negotiation of an AfCFTA Protocol on e-Commerce".[60]

Given the substantive harmonization of most competition laws on the continent there is scope to springboard closer enforcement cooperation in anticipation of African economic integration through the AfCFTA. The first step towards this is ensuring that all member states across the continent adopt relevant competition laws and regulations, which should be supported by strong and independent enforcement institutions that will anchor the implementation of competition policy and regulation on the continent.

Further, the African Competition Forum (ACF), a network of 32 African competition regulators and six regional bodies[61] could be leveraged to develop formal committees dedicated to systematically ensuring and recording the consistent enforcement of competition

55 The Protocol on competition needs to explicitly consider competition issues in digital markets, including online platforms and emerging business models, but also consumer protection. See UNCTAD (2020). African Continental Free Trade Area Phase II Negotiations: A Space for a Competition Protocol? United Nations Publication. New York and Geneva.

56 Ibid.

57 Ibid.

58 Ibid.

59 https://www.tralac.org/blog/article/14692-an-agenda-for-the-afcfta-protocol-on-e-commerce.html#_ftn1; https://africa.com/action-needed-for-africa-to-benefit-from-digital-trade/

60 African Union (2020). Decision on the African Continental Free Trade Area (AfCFTA). Assembly/AU/Dec.751(XXXIII).

61 As at February 2021, ACF members include Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo (Brazzaville), Cote d'Ivoire, Egypt, Eswatini, Ethiopia, The Gambia, Gabon, Guinea, Kenya, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Seychelles, South Africa, United Republic of Tanzania, Togo, Tunisia, Zambia, Zimbabwe, Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC Competition Authority), Economic Community of West African States (ECOWAS Regional Competition Authority), Southern African Development Community (SADC) and West African Economic Monetary Union (WAEMU).

laws across the continent, capacity building and technical assistance, exchange of information and best practices as well as research and advocacy. These new areas that could be undertaken by the ACF need to be supported by existing authorities both domestically and within Regional Economic Communities (RECs) recognized by the African Union. Given the common developmental agenda, further cooperation within the continent and through the ACF could be geared towards finding a common regulatory approach to assist local start-ups to gain scale across African markets, particularly as the AfCFTA progresses. Developing markets are typically small and cannot build the scale in home markets that the United States and European Union firms can. So, for ease of rollout, a common regulatory approach would enable local African start-ups to meet the global challengers.

Beyond coordination on the African continent, developing countries need to explore ways in which enforcement and remedial action in the larger jurisdictions are exported to smaller jurisdictions. Sometimes this happens naturally, for instance where there is a common global digital service interface such that any remedial changes in merger reviews are applied globally. However, in many instances this is not the case. One solution is for smaller jurisdictions to monitor and keep abreast of investigations and referrals in other jurisdictions. Again here, the role of the ACF as a platform for coordination could be instrumental in collating and disseminating such information. The aim would be to determine relevance for each jurisdiction prior to seeking a similar order against the firm leveraging off the foreign finding.

In the long term, developing a legal instrument would be useful for facilitating automatic changes domestically, where adverse findings are made by foreign competition authorities against a global firm operating the same business model locally. Currently, UNCTAD member States have, in principle, agreed to a cooperation framework which allows for information exchanges and debate on enforcement action with a cross-country impact. This framework, namely, the Guiding policies and procedures under section F of the UN Set (GPP), is adopted at the Eighth United Nations Conference to Review All Aspects of the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices in October 2020. which is a comprehensive and practical guidance instrument to facilitate cooperation among competition authorities worldwide.[62] GPP provides for a toolkit for cooperation in competition cases and allows for flexibility between the authorities in initiating cooperation based on each authority's relevant domestic law and policy, or mutual agreement and understanding.[63] However, the extent to which this soft law instrument would be sufficient in addressing enforcement action for digital markets remains uncertain.

E. Conclusion and recommendations

Competition law enforcement in digital markets has been a prominent theme of global dialogues and academic research in recent years. In response, agencies in multiple jurisdictions have engaged in efforts to upgrade their skills, investigative tools and in proactive enforcement activities alongside advocacy initiatives aimed at regulation. The debate and enforcement actions have moved beyond the FAAGS and data privacy, which impacted the daily work of developing countries less, into discussions about national merger activity and potential market conduct that might shape local digital markets in the future.

In developing market economies, the competition policy agenda around digital markets must be more comprehensive to help address the various challenges faced locally. Challenges arising from smaller economies, constrained enforcement resources and relatively limited jurisdictional reach must all be factored into the choices made. Further, specific challenges such as concentrated markets and vast inequality indicate that regulating digital markets would provide an opportunity to open markets for new entrepreneurs and disruptive entry. Facilitating disruption may succeed where current competition policy regimes have failed in developing markets.

More specifically, the CCSA is increasingly confronting national merger activity and potential market conduct that may shape local digital markets in the future. While the CCSA has started an advocacy initiative to highlight the digital economy issues, there is a need for a deliberate programme around skills development

[62] UNCTAD (2021). *Guiding Policies and Procedures under Section F of the United Nations Set on Competition.* United Nations Publication. New York and Geneva. Available at: https://unctad.org/system/files/official-document/ditccplpmisc2021d2_en.pdf.

[63] Ibid.

and establishing an appropriate regulatory response. These responses are not unique to the CCSA and would resonate with other competition authorities on the continent and other developing nations. Such a programme should include, inter alia:

1. Upskilling on knowledge of business strategies and commercial models of digital services: There is a knowledge gap in many jurisdictions regarding deep understanding of the business models, strategies and tactics of firms in digital markets, as well as the consumer behaviour which shapes such models. Bridging this knowledge gap requires engagement with those involved on the business side and not just economists or lawyers in competition regulation. This type of programme necessitates collaboration across the board from private sector, public sector, and sector regulators as well as academia.
2. Revisions to investigative tools used to assess mergers and anticompetitive conduct.
3. Instituting proactive scanning for abusive market conduct.
4. Advocacy to promote appropriate regulation in respect of interrelated concerns such as data privacy and consumer protection legislation including deepening cooperation across regulators.

While mobile broadband coverage may be pervasive in a country like South Africa with close to 100 per cent of the population covered by mobile operators, low-income individuals are unable to afford access to digital services due to the cost of devices and the price of data services offered by the operators. As outlined above, another practical recommendation for developing nations would be advocating for legislative changes to improve connectivity and universal access to broadband to lessen the digital divide and ensure inclusivity in the digital age.

Further, given the substantive harmonization of most competition laws on the continent there is scope to springboard closer enforcement cooperation in anticipation of African economic integration through the AfCFTA. One possibility for competition authorities such as the CCSA is to use the established ACF network as the relevant platform to leverage broader coordination and collaboration to ensure consistent enforcement action and regulation of competition in digital markets regionally and globally. This is, however, a longer-term objective. In the shorter term, the cooperative framework by the UNCTAD GPP, may allow for greater information exchanges and debate on enforcement action with a cross-country impact and may be of value to the enforcement activity of developing market economies.

CHAPTER V: COMPETITION POLICY AND PERSONAL DATA PROTECTION IN BRAZIL: NEW CHALLENGES AND CONTINUING CONCERNS

Diogo R. Coutinho and Beatriz Kira

A. Introduction

The concentration of economic power in the hands of a few large companies – particularly the so-called Big Tech – has led to a global call for greater legal scrutiny and more democratic control, which, in turn, has translated into a debate about the need for new regulatory and competition policy approaches.[1]

Data – and in particular personal data – is considered an important source of market power, as well as an increasingly valuable asset in the transactions entered into by these companies. A range of academics, regulators, and policymakers are under pressure to review and reform legislation to tame the tech titans. As the unprecedented hearing in the United States House Judiciary Committee in July 2020, and a subsequent report, showed, the main targets is the group often referred to collectively as GAFAM (Google, Amazon, Facebook, Apple, Microsoft).[2] But it could also include other large or fast-growing businesses in different sectors, such as Uber, Airbnb, and Booking.com. Competition authorities around the world are increasingly aware of the centrality of data for the business models of Internet companies. Control over consumers' data has raised not only competition concerns but also protection and privacy concerns (Khan 2017; Wu 2018).

While many of the theoretical and practical problems involving the operation of digital platforms discussed in the literature are shared by different countries, solutions have been focused on the debate around policy and regulation in the United States and in the European Union (Scott Morton et al, 2019; Furman et al. 2019; Crémer et al. 2019). Although these debates have started to resonate globally, to date there is still little discussion on how similar challenges are being addressed by other countries, in particular low- and middle-income countries.[3] This paper makes a focused contribution to the field by shedding light on the features of digital platforms and their implications for competition law and policy in Brazil. It analyses the distinctive challenges brought by technology companies to competition in light of the Brazilian law and institutions.

In particular, the paper discusses the role played by personal data as a key asset for digital platforms, and the interplay between competition policy and data protection regulations in Brazil. The goal is to place the country in the international debate and to understand competition policy in its local specificity, so that its legal structuring and design are conceived and studied in light of its own features, not as aprioristic application of allegedly universal models (Coutinho 2014). As argued by Tirole, "the complexity of the interactions between economic actors, information asymmetries, uncertainty, and a multiplicity of contexts means that it takes a great deal of reflection to find the best way to manage competition and design regulation" (Tirole 2017: 355).

In Brazil, there is a fairly well-established history of competition law and institutions designed to protect and promote competition. While many scholars argue that United States antitrust enforcement has been

1 As economic and political power are intertwined, we speak of "democratic control" of big tech companies on the assumption that some sort of regulation can ultimately foster – through different means and rationales, ranging from competition between platforms to command and control discipline – goals such as plurality of world views and diversity of opinions in the public sphere, as well as transparency and the countering of fake news.

2 On the abovementioned congressional hearing, see the House Committee on the Judiciary's webpage at https://judiciary.house.gov/calendar/eventsingle.aspx?EventID=3113.

3 Two relevant studies analysing competition policy in the so-called BRICS countries (Brazil, Russia, India, China, and South Africa) have recently been published. One was a study published by the Competition Authorities Working Group on the Digital Economy led by Patricia Morita Sakowski, Deputy-Chief Economist at CADE (BRICS 2019). The other was a report by the BRICS Competition Law and Policy Centre (Lianos & Ivanov 2019).

"effectively walking backwards" (Scott Morton 2019) – with studies showing the share of GDP spent on enforcement declining steadily and agency activity falling – the Brazilian experience has been rich and consistent (Azevedo, 2010). Since 2012, when the current law came into force (Law 12529/2011), a rich body of case law has emerged. Indeed, the Brazilian competition authority, namely the Conselho Administrativo de Defesa Econômica (CADE), has been considered one of the most efficient public bodies in Brazil, and a model for Latin America for creating and implementing competition policies to control cartels and mergers and to curb anticompetitive behaviour (OECD, 2019). With 70 per cent of the Brazilian population connected to the Internet (Nic.br, 2020) and a strong presence of large technology companies in the country, CADE has increasingly received and reviewed complex antitrust cases involving Internet companies, as we discuss in section C.

When it comes to personal data protection, however, Brazil's history of regulation and enforcement is much more recent. The Brazilian Personal Data Protection Law (*Lei Geral de Proteção de Dados* **(**LGPD)) was approved in August 2018, and entered into force only in June 2020. However, in light of the many disruptions from the Covid-19 pandemic, the Brazilian Congress has decided to postpone the enforcement of its sanctions and penalties until August 2021. There are also ongoing debates and uncertainty regarding the enforcement of the law, largely because the Brazilian Data Protection Authority (*Autoridade Nacional de Proteção de Dado Nacional de Proteção de Dados* (ANPD)) has not yet been fully structured and resourced. At the time of writing, ANPD's commissioners had been appointed (and subsequently approved by the Brazilian Senate) and a decree (*Decreto* 10.474/2020) that partly details its structure and attributions had been enacted. However, the agency has not been staffed and it is still inactive. Therefore, the future of the ANPD and its institutional design – which includes the degree of autonomy and independence it is going to effectively enjoy – will be a determinant of the future of data protection and in Brazil, and to the engagement of the new authority with other relevant bodies, including CADE (Zanatta & Abramovay 2019; Zanatta & Renzetti 2019).

This paper is structured as follows. Section B discusses the role data, as increasingly valuable assets, play in the business models of digital platforms and the competition policy issues emerging from them. Section C frames the interaction between personal data and competition policy within Brazilian law, from both a data protection and competition policy perspective, and reviews case judgements of CADE. Section D discusses institutional coordination and the extent to which CADE and the new Brazilian data protection authority can interact by sharing competences, exchanging information, and building dialogue to protect consumers and foster competition. In section E we argue that, due to the transnational nature of digital platforms, consumer protection and competition issues are becoming increasingly international. We briefly discuss the roles of international networks and organizations such as the International Competition Network (ICN) and the United Nations Conference on Trade and Development (UNCTAD), in the global governance of competition policy.

B. Data is not the new oil – but it is a valuable asset in the digital age

Features of digital platforms which may result in competition issues and harms to consumers have been extensively articulated in existing literature, reports, and market studies. This section briefly outlines some of the key aspects of digital platforms, with a focus on the importance of consumer data for their business models.

Digital platforms are multi-sided markets, which simultaneously serve two or more groups of users. Multi-sided markets are popular business models that have been adopted both in the online and the brick-and-mortar world for many years – in some cases for thousands of years.[4] Payments, financial exchanges, estate agents, shopping centres, are some of the examples of intermediate platforms (Evans & Schmalensee 2016; Rochet & Tirole 2003). Also, digital platforms can be compared to key utilities in the sense that users cannot do without them and have limited choice, which is why there is increasing consideration being given to their regulation (UNCTAD 2019a).

[4] Evans and Schmalensee (2016) present a detailed history of multi-sided markets – or "matchmakers", according to their terminology. They report that this business model was already popular in Athens around 300 BCE, where merchants, shipowners, and lenders would gather near the docks to connect with each other to assemble a trading voyage (Evans & Schmalensee 2016).

Multi-sided markets are typically characterized by strong network effects, in which the value of the services provided increases as the number of users increases.[5] Platforms are also prone to economies of scale, in which the marginal cost of the service or product decreases as the scale of the platforms increases. Together, network effects and economies of scale give platforms the opportunity to quickly grow and reach dominance after a "tipping point" has been reached. In practice, it means that once a platform has grown to a certain size, it becomes very difficult for a competitor to contest the market effectively, and consumers are more likely to be locked in with the dominant firm – i.e., the one that reaches critical mass first. When that happens, the competition is no longer in the market, but rather for the market (Stucke & Grunes 2016). This creates very specific and challenging outcomes and potential risks.

The distinguishing feature about digital platforms, though, is their reliance on digital technologies[6] and the central role played by data. As the fuel that powers the digital economy, data is often compared to commodities such as oil and gold (UNCTAD 2019a). Data and the digital technologies allow complex decisions to be made in real time, based in the processing of large amounts of data (CMA 2020).[7] In combination, the information collected provides a detailed picture about users' preferences and habits, making it possible to tailor products, services, and advertisements with a high degree of precision. Platforms use this data to improve their design and features, employ microtargeting techniques themselves, or sell information for advertisement purposes (Brown & Marsden 2013).

All those uses considered, it is not difficult to understand why data is so central to the digital economy, though not necessarily visible or easily quantifiable. Due to the strong network effects and economies of scale discussed above, if the amount of data held by a dominant player can act as a substantial barrier to entry and expansion, such that the market is not contestable, then control of users' data can translate into market power. Such power, in turn, gives the dominant platform the opportunity to increase prices, decrease quality, and prevent the entry of more efficient or more innovative competitors. This is why data are so important not only per se, but also as a means to provide financial (potentially monopoly) gains to those who own and trade them.

Data as assets are also resulting in important changes to antitrust theory and practice. Some scholars argue that competition policy should abandon the focus on relevant market and shift its attention to engage with the "value capture strategies" adopted by economic actors – an approach which would require the development of new tools to represent more accurately horizontal and vertical competitive interactions in the digital economy (Lianos 2019). Others believe that the relevance of data in today's society is also often considered grounds to frame data as a public good or an essential facility (see for example Graef 2016).[8]

C. Competition policy and data protection in light of the Brazilian law

This section discusses the theoretical foundations of competition policy in Brazil and identifies the basis for the steps of analysis adopted by the Brazilian competition authority. It then examines how these

5 Network effects can be direct or indirect. Direct network effects focus on one side of the market and exist when the demand for one good depends on how many other people purchase it, among the same group of users. For example, the larger the number of WhatsApp users, the greater the benefits each user can gather from using the platform. Indirect network effects, in turn, are related to multiple sides of the market and are present when the number of agents engaged in one side of the market affects the value of the platform to agents operating on the other side. Mobile operating systems, like the Apple iOS or the Google Android, are good examples of multi-sided platforms with strong indirect network effects. The greater the number of mobile users adopting it, the more developers write apps for that system, which in turn attracts more users to the platform.

6 The World Bank's 2002 ICT Sector Strategy defines digital technologies as "hardware, software, networks, and media for collection, storage, processing, transmission, and presentation of information (voice, data, text, images)", and this definition remains relevant today (World Bank 2002).

7 Digital platforms capture a plethora of information about their users from many different sources, including i) information that is voluntarily shared with a platform when registering for a service (e.g. name and email address), ii) observed information collected automatically via the use of a service or device (e.g. metadata), iii) data from tracking and observing users' activities and preferences (e.g. browsing history, likes, follows). (Typology adapted from CMA's report on digital advertisement (CMA 2020)).

8 Many, however, contest the idea of a data commons. While a commons is a type of good that is rival in use and non-excludable, data is the opposite. That is, data is non-rivalrous, meaning it can be used by multiple people at the same time without diminishing in volume or being used up (Jones & Tonetti 2020).

issues raised by digital platforms are addressed by Brazilian legislation – both from a data protection and from a competition policy perspective.

Brazil is a vast middle-income country facing many of the constraints experienced by developing nations. However, it is home to what is now considered internationally as a well respected competition agency, with a relatively consistent history of competition law and enforcement. The foundations of Brazilian competition policy and the reforms implemented over the years can be linked to similar approaches adopted by developed countries and follow recommendations made by international antitrust experts and networks such as ICN and OECD in peer reviews (McMahon 2016).

CADE was formally created in 1962, as the body of the Ministry of Justice responsible for monitoring companies' economic management and accounting systems.[9] After a number of institutional developments and changes, in 1994 CADE became an independent agency working together with other regulatory bodies responsible for competition law and policy enforcement. After Brazil's competition framework was reformed again, based on OECD recommendations and to align competition law in Brazil with international practice, in 2012 CADE became the single autonomous competition agency responsible for competition law enforcement.

The institutional framework and the provisions established by the competition law of 2011, alongside with the history of enforcement since said law was enacted, established what is the current and traditional Brazilian competition policy. The tradition of Brazilian competition policy prescribes that competition cases should assess not only the anticompetitive effects on market structure (increase in concentration), following the structure–conduct–performance (SCP) tradition, but also the potential impacts in terms of efficiency gains. Conventional competition analysis applies one of two modes of scrutiny: per se illegality, or the rule of reason. Application of the rule of reason follows three basic sequential steps: (i) identification of the relevant market, (ii) analysis of the conditions for the exercise of market power; (iii) consideration of anticompetitive and procompetitive effects (Gama & Ruiz 2007). These steps will form the structure of the discussion of the following sections. In similar terms, Azevedo (2010) describes the necessary conditions to characterize anticompetitive behaviour as follows: a) the existence of dominant position, b) the feasibility and economic rationality of market foreclosure and raising the costs of rivals, and c) analysis of efficiencies.

1. Relevant market

The Brazilian law establishes two general ways of assessing the dominant position of a given market player. In Brazil, one way is based on a pre-established market share threshold – a company is considered dominant when it controls 20 per cent or more of the relevant market. Another way is based on the ability of a company to change the conditions of the market unilaterally or coordinately.[10] Price-cost margins have traditionally been adopted as one proxy measure of market power by the Brazilian competition authority. In digital markets, however, defining market power based on the ability of a firm to raise prices has shown to be a reductionist conception.[11] Gonçalves (2018) argues that aspects related to non-price competition should take centre stage not only in the identification of market power, but especially in the analysis of effects. The author suggests the adoption of new proxies, such as the resources spent by users on the platform (e.g. screen time and number of paid advertisements) and the number of application downloads (Gonçalves 2018).

2. Merger control

Over the last decade, Amazon, Apple, Facebook, Google, and Microsoft combined have made over 400 acquisitions globally, with more than half of these – close to 250 – in the last five years *(The Economist* 2019). In 2020 alone, Facebook announced the takeover of the GIF-making company Giphy and made investments in the Indonesian technology company Gojek; Google acquired Fitbit subject to conditions imposed by the European Commission;[12] and Microsoft expanded its cloud computing companies with the purchase of Affirmed Networks, Metaswitch Networks (Isaac, 2020). Despite the global recession caused by the pandemic, technology companies have continued to grow (partially driven by the growing practice of employees working-from-home) and are now among the largest in

9 Law 4137/1962.

10 Law 12529/2011, article 36, paragraph II.

11 For a discussion on rethinking antitrust tools for multi-sided platforms, see (OECD, 2018b).

12 https://www.cnbc.com/2020/12/17/googles-2point1-billion-acquisition-of-fitbit-approved-by-eu.html.

the world by market value.[13] However, only a handful of these mergers has been scrutinized by competition authorities, and none has been blocked.[14]

In this context, there is a heated debate around whether the rules of merger control would require reforms in order to be better equipped to identify and halt operations that could harm competition. Some proposals are being considered to better adapt merger control to the features of digital platforms. One solution is shifting the burden of proof onto the acquiring company to prove that the target is not a viable competitor or that the merger will result in efficiencies (Khan 2019). Under a similar rule, Facebook's acquisition of Instagram and WhatsApp, for example, could have been subjected to merger control, and the acquiring company (Facebook) would have to prove the pro-competitive effect of the transaction.[15] More radical proposals regarding merger control in the United States involve a per se ban on mergers that reduce the number of major firms to less than four (Wu 2018: 128–129). The expert panel convened by the United Kingdom government published a report in March 2019 that included the proposal that companies that enjoy "strategic market status" – identified through proxies for assessing the relevant market and market power – should be subjected to special rules, which include an obligation to notify any merger or acquisition to the competition authority (Furman et al. 2019).

In Brazil, following the path of other jurisdictions, the most recent reform of Brazilian competition law introduced the ex ante merger approval process for cases that fall within the legal threshold (Gonçalves 2018). CADE's pre-merger notification regime requires that companies involved in the transaction submit extensive information about the proposed transaction, the players involved, the rationale for the transaction, the relevant market, and internal documents relating to the transaction (Lee et al. 2018).

The acquisition of new-born companies, which are often not profitable, is usually not subject to ex ante analysis. However, as argued by Gonçalves (2018), article 88, paragraph I, of the Brazilian competition law allows modification of the revenue threshold following requests from CADE and ordinances from the Ministry of Justice and the Ministry of Economy; paragraph VII gives CADE the authority to examine the impacts of any transaction not meeting the revenue threshold within one year of its completion. It is worth mentioning that Brazilian law allows CADE to overturn decisions that were based on false or misleading information provided by the interested parties, in case of non-compliance with any of the imposed obligations, or if the aimed benefits were not achieved.[16]

In terms of remedies, the Brazilian law allows CADE to order the separation of a company, transfer of corporate control, sale of assets, or partial termination of its activities as possible remedies to violations of the economic order, based on the gravity of the facts and on the protection of the public interest.[17] Although the law is broad enough to allow structural remedies such as breakups both in cases of anticompetitive behaviour and in conditional mergers and acquisitions, CADE has overwhelmingly adopted this remedy for addressing the latter.[18] It is worth mentioning, however, that the separation could only follow from an administrative decision which found evidence of violation of the competition law, and not as a punishment for "bigness" per se.[19]

13 In January 2020, Alphabet, Google's parent company, was the fourth US company to reach the market value of 1 trillion dollars. Apple, Amazon, and Microsoft have also passed this milestone. See: https://www.wsj.com/articles/alphabet-becomes-fourth-u-s-company-to-ever-reach-1-trillion-market-value-11579208802. In June 2020, during one of the most critical moments in the Covid-19 pandemic, technology companies continued to prosper. See: https://www.ft.com/content/844ed28c-8074-4856-bde0-20f3bf4cd8f0 and https://www.ft.com/content/f8251e5f-10a7-4f7a-9047-b438e4d7f83a.

14 https://www.competitionpolicyinternational.com/competition-in-the-digital-age-reflecting-on-digital-merger-investigations/

15 Facebook's acquisitions of WhatsApp and Instagram are now under scrutiny in the United States. The Federal Trade Commission (FTC) and dozens of state attorneys-general have filed lawsuits asking for divestiture of Facebook assets. See: https://www.politico.com/news/2020/12/13/facebook-antitrust-flip-flop-444652.

16 Law 12529/2011, article 91.

17 Law 12529/2011, article 38, caput and paragraph V.

18 CADE adopted structural remedies in a high-profile cartel case decided in 2014 (Administrative Proceeding No. 08012.011142/2006-79). The authority unanimously condemned the so-called cement cartel, issuing fines, ordering divestment of plants, and prohibiting companies from carrying out operations in the cement and concrete sector until 2019. According to the authorities, the integration between cement and concrete plants was key for the functioning of the cartel, and also led to market closure, thus justifying the adoption of a structural remedy to reduce entry barriers and encourage rivalry in the market.

19 The Microsoft-LinkedIn case was reviewed by the European Commission, and was approved with behavioural remedies. As pointed out by Giannino (2017), on this occasion, the Commission "defined for the first time the relevant market for professional social networking services".

3. Recent cases

CADE recently analysed several transactions involving digital platforms, most of which were approved without conditions. For example, in 2013, Google notified the acquisition of Vevo, an online video platform.[20] CADE identified two relevant markets in the transaction, namely online advertising and online home entertainment, and cleared the transaction on the basis that it would not harm competition in either of them.[21] More recently, in 2016, Microsoft notified the acquisition of the social network LinkedIn.[22] CADE considered that many forms of advertising (sponsored content, sponsored e-mail, dynamic adds, etc.) were involved in the transaction. However, due to the low market share of both parts in all of them, the Reporting Commissioner left the definition of the market open and did not adopt any of these segmentations in their analysis. The transaction was cleared without remedies.

In 2016, CADE reviewed a case in which Brazil's leading banks formed a joint venture for credit scoring.[23] Credit-scoring companies are multi-sided markets with strong network effects. Financial institutions are the main suppliers of inputs (information about users' financial transactions) to credit bureaux, while they are also the main consumers of bureaux's products (credit scores). Thus, CADE was concerned that the transaction would lead to vertical integration. In this case, CADE analysed whether data (information about consumers) might act as an entry barrier. When data is also a source of market power, a dominant platform can leverage its userbase to prevent potential competitors from entering the market, which might lead to market foreclosure. The Superintendent General and the Reporting Commissioner highlighted the risks of foreclosure in both the markets of positive and negative credit scoring, due to the great volume of consumers' data held by the proposing banks. The joint venture was approved with remedies, conditioned to a commitment that the parties would continue to provide data to all credit bureaux, with no discrimination or provision of favourable treatment to their own bureau.[24]

CADE has also analysed cases involving allegations of anticompetitive behaviour on the part of Internet platforms. Google alone was the target of four investigations. In one of them, the search engine was accused of scraping content from downstream competing price comparison sites (e.g. reviews provided by users of the site Buscapé) to improve the results of its own comparison-shopping engine. In this case, data played a particularly important role. During the case proceedings, CADE examined if big data had become a relevant competitive factor. In preliminary documents the authority recognized that companies could leverage their access to data and could extract value from it by selling information about consumers' patterns and behaviour to advertisement companies. Nonetheless, this case was closed because the authority found no evidence that the reported behaviour was anticompetitive in relation to Brazilian legislation.[25]

Brazil has also investigated its own version of the "Google shopping case", in which CADE examined similar allegations to the ones brought by the European Commission. In the Brazilian case, Google was accused of abusing its dominant position in the general online search by privileging its own local search engine. This case was highly controversial and even the Commissioners could not agree on a result, as three of them voted for convicting Google, while the other three voted to clear Google from any charges. The final decision was only reached after a casting vote by the president of CADE, who decided to close the case. When analysing the case, however, the Brazilian authority did recognize that Google could transfer its market power in the generic search market to an adjacent market, but a small majority of Commissioners' interpretation was that the specific conduct under scrutiny did not in practice produce anticompetitive effects in Brazil (Silveira & Fernandes 2019).

4. The effects of the Coronavirus pandemic on competition in Brazil

What is clear from CADE's recent decision is that data plays a relevant role in the business model of digital platforms and could lead to anticompetitive outcomes, either through increased concentration or facilitating anticompetitive behaviour. In the case of Brazil, even though data protection legislation was approved in 2018 (the LGPD), the law only entered into force in June 2020.

20 AC 08700.003373/2013-80.

21 On the Google-Vevo transaction merger review in Brazil, see (OECD, 2018).

22 AC 08700.006084/2016-85.

23 AC 08700.002792/2016-47.

24 AC 08700.002792/2016-47.

25 PA 08700.009082/2013-03.

And even then, the president and the National Congress decided to postpone the enforcement of sanctions, allegedly due to the Covid-19 crisis. The functioning of a data protection authority in this context is also long overdue, and its design will be decisive in integrating the data protection policy within the larger institutional framework of economic regulation in Brazil, which includes competition policy and its relationship with CADE.

Covid-19 has also brought about novel challenges to the Brazilian competition authority. On the one hand, there has been a need to address competition issues arising from the emergency situation caused by the pandemic, such as exemptions granted to collaboration agreements between competitors in sectors including pharmaceuticals and retail. Indeed, many countries and international organizations around the world have issued recommendations on how to protect competition during the crisis, including ensuring equal conditions for competitors and vigorous enforcement of legislation to prevent cartels and the abuse of market power (OECD, 2020; UNCTAD, 2020a, 2020d). In Brazil, CADE published a note providing guidance on the possibility of time-bound collaboration agreements in all sectors for the duration of the health emergency and on the procedures available to obtain CADE's opinions on potential agreements between competitors (CADE 2020; Gonçalves et al. 2020).

On the other hand, the crisis increased the risks of anticompetitive activities, in particular, cases associated with digital platforms (Gonçalves et al. 2020). Due to measures adopted to combat the spread of coronavirus, many aspects of life have been forced to go online. As a result, digital platforms have become even more ubiquitous. While the world economy as a whole has been in decline because of the pandemic, some of the biggest technology companies have seen their global userbase and revenue rise. For example, Netflix and YouTube registered a big jump in their respective audiences (Wakabayashi et al. 2020), and videoconferencing applications have seen a subscriber boom (Sherman 2020). This scenario can significantly increase the market power of these platforms, making some of the risks discussed above even more acute.

In terms of market concentration, the pandemic and the economic crisis that it has triggered could lead to an environment that is conducive to the so-called "killer acquisitions", in which large companies acquire smaller and innovative companies, just to eliminate potential rivals (Cunningham et al. 2021; Valletti & Zenger 2019). In these operations, an incumbent player acquires a nascent company whose technologies have the potential to challenge existing products or services. As such, a potentially significant competitor is removed from the market, thereby weakening competition. In the aftermath of the pandemic, therefore, it is even more important that the agency proceeds with caution when a digital platform seeks to acquire a company that operates in an adjacent market and considers the potential effects of the operation on competition, "especially if the target firm is well positioned to challenge the incumbent's position in the foreseeable future" (Shapiro 2019).[26]

D. Institutional coordination

Alongside discussions of whether competition authorities around the world might need to update their toolbox or to revisit their theoretical foundations, there is a growing debate about how the changes should be implemented and which remedies would help to address the challenges of the digital age. While economic stakes are becoming increasingly complex, spreading across different policy areas, the legal regulatory mechanisms remain confined to a particular set of rules or institutions (Alexiadis & Pereira Neto 2019). This creates the risk of contradictory, fragmented or inconsistent decisions made by different authorities. This section discusses the extent to which CADE and the new Brazilian data protection authority can interact by sharing competences, exchanging information, and building institutional dialogue to protect consumers and foster competition and innovation.

To deal with anticompetitive practices in the digital economy, competition policy alone might not be enough and regulation might be needed. As competition concerns increasingly overlap with the protection of privacy, there is also a case for considering "new ex ante regulatory tools to enhance the competitive process in digital markets should be

[26] For example, Google's acquisition of Fitbit (approved with restrictions in Europe, as mentioned above) raised concerns among consumer protection organizations around the world. The Brazilian Institute of Consumer Protection (*Instituto Brasileiro de Defesa do Consumidor (*IDEC*)*) has notified CADE about the antitrust and data protection risks that could emerge from this operation and has asked for an investigation into the impacts of the takeover. See: https://idec.org.br/noticia/idec-solicita-investigacao-da-operacao-de-compra-da-fitbit-pela-google.

based on open standards and interoperability, data mobility, consumer transparency, and algorithmic pricing" (Coyle 2019a: 860). As proposed by Furman et al. (2019) in the Unlocking Digital Competition report commissioned by the UK government, "Active efforts should also make it easier for consumers to move their data across digital services, to build systems around open standards, and to make data available for competitors, offering benefits to consumers and also facilitating the entry of new businesses. Implemented effectively, this approach would be more flexible, predictable, and timely than the current system" (Furman et al. 2019).

In sum, since digital platforms control consumer data to a large extent, there is a need to adapt the competition framework by broadening the consumer welfare standard beyond price and market share considerations, as consumer welfare also involves choice, privacy, data protection and innovation (UNCTAD 2019a). However, a key question to address is how the legal and regulatory framework can deal with legitimate data protection concerns while preserving effective competition and innovation in digital markets. For example, in the United Kingdom, the Competition and Markets Authority (CMA) is concerned that digital advertising platforms have "an incentive to interpret data protection regulation in a way that entrenches their own competitive advantage". In particular, the CMA is concerned with the possibility that general data protection regulation (GDPR) facilitates the creation of "walled-gardens", in which big companies would be more willing to share the data with one company and all its associated products, rather than providing data to different competitors (CMA 2020). While sharing information between firms could address the issue of unequal access to data, it would also make the data more vulnerable to leaks and other associated data protection risks.

Collaboration between bodies with different mandates is thus necessary for enabling the more coherent and responsive regulation of digital platforms. As Khan (2019) argues, "the fact that regulatory remedies are imposed by antitrust enforcers, who generally lack regulatory tools and resources, makes successful oversight and compliance even more doubtful" (Khan 2019). Any solution, therefore, would require a joint consideration of the interface between competition, data, and consumer protection laws and agencies. As these three areas overlap and evolve alongside one another, ongoing cooperation, with the ability to be fine-tuned and improved over time, is more likely to produce better outcomes for users. Putting together an effective framework not only requires effective policy leadership, but also effective communication and coordination across regulators and relevant government agencies on an ongoing basis. Where to focus in bringing regulators together is thus as important as putting together a roadmap of prioritized action steps.

In the case of Brazil, even if one considers that CADE has no jurisdiction to decide on data protection issues, it might certainly be required to consult with the future data protection agency in a structured way. Negotiating memoranda of understanding (MoU), cooperation agreements, regular interactions and updates, and other soft instruments that foster institutional dialogue can be a good starting point. This could be similar to, for example, – or even an improvement on – the cooperation arrangement between CADE and the Central Bank of Brazil (BCB) to address cases involving financial regulation and competition, or replicate the case of the telecommunications sector, in which CADE and the Brazilian regulator (Anatel) established and follow procedural rules that define an institutional allocation of tasks between them. The fact that the Brazilian data protection authority has only recently been created represents a valuable – but also somewhat risky – window of opportunity for conducting an experiment of institutional design for regulatory and antitrust coordination.[27] This could be a defining moment that would ultimately influence and determine the degree of effectiveness of both antitrust and data protection enforcement in the country. The prospects and outcomes will depend on several variables, including the degree of autonomy and technical capacity granted to the ANPD.[28]

[27] In June 2021 CADE and the ANDP established a technical cooperation agreement to curb activities that are harmful to the economic order and to promote competition in services that collect and process personal data. This is the first, important step towards building cooperation and continuous dialogue between these regulators. See https://www.gov.br/anpd/pt-br/assuntos/noticias/anpd-e-cade-assinam-acordo-de-cooperacao-tecnica (accessed 6 June 2021).

[28] The federal law that initially established ANPD has been partly vetoed (for formal reasons), so that it has been originally enacted – awkward though this may sound – without specifying how the data protection authority would be institutionally structured. It has been amended by Law 13.853/2019, which expressly states that the Brazilian data protection authority will be, at least during its initial years of activities, directly and hierarchically subordinated to the president of Brazil, as opposed to an independent body. In our view, this creates undesirable uncertainty about the institutional robustness of the data protection enforcement in the country.

If it is true that institutional coordination matters, institutional forms and functions are key variables whose combination depends on predefined policy ends. One institution can serve more than one function, and many institutions can serve the same function (although they would all serve other functions as well), and the same function can be served by different institutions in different societies. Moreover, different institutions, in a task division, can play different functions that, seen as part of the same development strategy, complement each other (Chang 2006).

For this reason, the issue of institutional coordination – and the related multiple practical challenges – needs a rigorous debate that is well informed by international experiences and practices. While the architecture of the coordination needs to be well designed, experimentation and learning strategies, as well as impact assessment procedures should also be encouraged. Ex ante design should be revisited through ex post evaluation and redesign. This makes the integration and coordination of data protection and antitrust policies an important goal, particularly with digital platforms accumulating so much market power. As noted by UNCTAD (2019a), developing countries with limited resources for taking on competition cases in an increasingly concentrated global economy can resort to ex ante regulatory arrangements – which, in our view, include institutional coordination procedures – that facilitate ex post competition law enforcement.[29]

Political economy also matters. Political and economic policy environments present additional complexity in the institutional maze. For example, a range of factors may affect the future relationship between CADE and ANPD: the actors, power struggles, interests, and processes, as well as limitations in state capacity, bottlenecks, and budgetary restrictions.[30] Any gaps, overlaps, and areas of disputes need to be addressed, and all synergies optimized, to prevent paralysis and institutional sclerosis. All this needs to happen while ensuring that the technological drive that fuels digital platforms is not compromised or dampened (Ahdieh 2009). How Brazilian policymakers will meet these challenges in the near future remains to be seen.

While ANPD's functioning is still to be defined in terms of regulatory patterns, as well as its procedural and substantive structuring, there is an opportunity for policymakers to facilitate institutional coordination with CADE. And in turn, CADE can also set the procedures for its interaction with ANPD. In addition, inter-institutional cooperation must also be reflected in future case law whereby data protection theory and best practices are combined with state-of-the-art and tailormade antitrust enforcement for digital platforms.

E. International coordination

Addressing the challenges of data protection and competition policy in the digital age requires stronger international mechanisms to evaluate, compare, and question competition policy implemented by different jurisdictions. As consumer protection and competition issues are increasingly becoming international, so the legal and regulatory mechanisms need to go beyond the national and regional level. At the same time, local factors need to be taken into account when international experiences and best practices are adopted and implemented. In this context, this section discusses the role of international networks such as ICN and organizations such as UNCTAD, in relation to the global governance of competition policy.

The number of countries that have adopted competition law and enforcement has significantly increased over the past decade, in particular among developing countries.[31] In line with this, perspectives on competition policy have also become more diverse, and there are many issues arising from differences in competition policy across jurisdictions. Mavroidis and Neven (2016) observe how competition policy has

[29] Ex ante regulation of big digital platforms seems to be gaining momentum (after a first moment in which it was considered just an option, and some experts even thought that regulation was not necessary and competition laws were enough). See, for instance, the regulation proposal (a public consultation) *Digital Services Act Package – Ex Ante Regulatory Instrument of Very Large Online Platforms Acting As Gatekeepers*, recently released by the European Commission. Document available at: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12418-Digital-Services-Act-package-ex-ante-regulatory-instrument-of-very-large-online-platforms-acting-as-gatekeepers

[30] The budgetary restrictions are related to limited funds for establishing the agency and staff, and were already present when the law was approved. The pandemic undoubtedly worsened the fiscal crisis in Brazil, as in other parts of the world, which is likely to also affect the creation of the ANPD.

[31] The number of jurisdictions with competition law enforcement jumped from fewer than 20 in 1990 to about 120 in 2014, and has continued to grow since then (OECD 2014). In 2015, 122 countries, including developing nations, had adopted competition laws (UNCTAD 2015). In 2020, this number increased to 140 countries across all continents (UNCTAD 2020b).

been used strategically to favour domestic companies, and describe the asymmetric consequences that competition policy decisions taken across different jurisdictions might have. The problems are especially pressing in the context of the digital economy, as the Internet is a worldwide network and most online platforms operate across many different countries. As such, any antitrust intervention by one single country, especially structural remedies such as break-ups and divesture, might have very limited effects.[32]

Regulatory authorities and international organizations are keenly aware of the need for improved international collaboration. The effects of big technology companies on digital and offline markets was the subject of intense discussions at the 18th session of the Intergovernmental Group of Experts on Competition Law and Policy in 2019 and the 8th United Nations Conference on Competition and Consumer Protection held virtually in 2020, both organized by UNCTAD in Geneva.[33] At the meetings a number of competition authorities from low- and middle-income countries expressed concern about the negative effects of the market power of digital platforms and are seeking ways to deal with the related challenges (UNCTAD 2019a).

There are three key areas of potential collaboration. First, there is scope for peer-learning and information sharing. Similar kinds of investigations and procedures involving digital companies are being conducted in different jurisdictions; authorities could benefit from working more closely together and sharing experiences and best practices to build up expertise and appropriate resources. This kind of cooperation is already happening and could be further facilitated by mechanisms such as that set out in the Guiding Policies and Procedures for international cooperation, adopted in 2020 at the 8th United Nations Conference on Competition and Consumer Protection (UNCTAD 2020c). Second, there is also huge potential for capacity building: for instance, UNCTAD also intensified collaboration to enrich the assessments on how the digital economy is unfolding, and the significant gaps that exist in terms of the ability and readiness of countries, enterprises and individuals to engage with this "new world" (UNCTAD 2019b). The organization has argued that there is "urgency of scaling up global support for capacity-building and technical assistance in this area to developing countries, in particular LDCs. A challenge is that countries must address a large number of policy areas in parallel and in a coordinated manner, often without reliable statistics and other information to inform the decision-making process" (UNCTAD 2019c). And third, there is a case for the establishment of shared tools and standards to facilitate cross-border analysis and enforcement of competition (and data protection). As Coyle (2019b) argues, "with a growing number of other countries also considering how to constrain the digital giants, the more international co-operation is possible in areas such as setting open data standards and developing a shared economic analysis of the competition dynamics in digital markets, the better" (Coyle 2019b).

A large part of addressing the challenges of the digital economy will involve improving systems and procedures for the international governance of competition policy. These include: designing mechanisms to evaluate, compare, and question competition policy implemented by different jurisdictions; developing tools to enhance the coordination and cooperation among competition authorities regarding transnational merger control; including competition clauses in bilateral and multilateral trade agreements; and applying dispute-resolution mechanisms to enforce competition across different jurisdictions (Mavroidis & Neven, 2016). Silveira (2013) discusses tools for enhancing coordination and cooperation among competition authorities regarding transnational merger control. According to the author, while economic stakes are increasingly becoming international, the legal regulatory mechanisms remain confined to a national or regional scale, which creates the risk of contradictory or inconsistent decisions made by different competition authorities. These ideas and forward-looking proposals can be, *mutatis mutandis*, mapped onto data protection regulation too, where the same type of transnational coordination tools and institutional arrangements can be considered essential. To that purpose, there are international and regional institutions and networks – such as UNCTAD, OECD, ICN and BRICS – which can potentially play a relevant role in harmonizing, coordinating, and

[32] The United States and China, where most of the biggest tech companies are based, are probably the two exceptions here.

[33] Intergovernmental Group of Experts on Competition Law and Policy, 18th session, 10-12 July 2019. Documents available at: https://unctad.org/en/Pages/MeetingDetails.aspx?meetingid=1895; Eighth United Nations Conference on Competition and Consumer Protection, 19-23 October 2020, documents available at: https://unctad.org/system/files/official-document/tdrbpconf9d4_en.pdf.

promoting dialogue. The progressing collaboration established among these institutions could and should be deepened, and synergies with competition and regulatory policies explored.

There are, however, still obstacles for putting formal cooperation mechanisms into practice. First, there are challenges related to collective action and how to effectively implement ways for countries to work together. In many ways, multilateralism and bilateral cooperation have been undermined. Even in areas where there are international organizations and established mechanisms to address cross-border issues, global cooperation is not easy. Second, there are significant political obstacles. The adoption of any formal or informal rules at the international level will largely depend on complex negotiations, and multiple and often conflicting interests of different countries will not always be aligned. States where most technology companies are based have more political clout and influence to directly push their interests in bilateral and multilateral agreements. Finally, the dynamism of digital platforms adds another layer of complexity to the regulation of big tech companies. Both domestic and international rule-making need to be sufficiently flexible and agile to adequately respond to powerful and fast-moving corporations, whose business models are ever-changing and evolving.

There are relevant organizations and networks that provide a forum for promoting international cooperation. But dialogue and knowledge exchange are not enough – and this is also true for matters related to digital technologies. Countries need to start testing avenues for collaboration and evidence-based impact assessment. Only through iterative learning processes can cooperation be enhanced and refined. The success and sustainability of any kind of collaboration will depend on robust channels and structures for there to be meaningful international cooperation.

F. Conclusion

In Brazil, coordination between CADE and ANPD is indispensable in ensuring policy effectiveness, rights protection and consumer welfare. Realizing this goal requires a dedicated institutional design effort to determine “who does what” in a predictable and stable manner. At the same time, the coordination arrangement needs to be open-ended and flexible, so that it provides room for revision, improvement, experimentation and route correction during the implementation and enforcement trajectories. This is because the specific institutional and operational dynamics of digital platforms require regulators and antitrust authorities to be consistently responsive. This is not easy or simple. International cooperation and dialogue, as well as internationally coordinated capacity building initiatives are thus indispensable for a country in which data protection regulation is being set up and antitrust enforcement (although fairly well consolidated) is also being institutionalized and strengthened.

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