

# Brexit, Big Tech, and Competition Law: The Case for a New Economic *Magna Carta* Fit for The Digital Age

ISHMAEL LIWANDA\*

## I. INTRODUCTION

By March 2020, the term ‘Covid’ had achieved a quick and near-ubiquitous addition into humanity’s collective lexicon.<sup>1</sup> The onset of the COVID-19 pandemic helped accelerate the digitalisation of much of our societies. Propelled by a pandemic-induced wave of technology adoption, billions relied on large technology giants like Amazon, Google, and Microsoft to maintain our economies, social lives and for many, entire livelihoods. Without the technology companies that brought us the digital age, the economic fallout resulting from the pandemic would have been much more severe.<sup>2</sup>

Yet, this rose-tinted characterisation of Big Tech masks the growing and increasingly global unease surrounding their seemingly unbridled encroachments into our lives. Concerns over the ever-growing size and scale of the technology Goliaths has led to increased scrutiny from regulators. The challenges posed by misinformation, increased political polarisation, and the decimation of small and medium sized businesses, in part due to the growing dominance of Big Tech companies—namely, but not exclusively, Microsoft, Amazon, Google, Meta, and Apple, (‘MAGMA’)—has resulted in a myriad of initiatives, both legal and political, to regulate the digital giants. For instance, in the USA, a report published by a House Judiciary Committee recommended a series of wide-ranging reforms, such as the structural separation of the biggest technology companies.<sup>3</sup> The European Commission (‘Commission’) has taken a similarly stringent approach, with it

\* LLM student at the London School of Economics and Political Science, LLB from the University of Bristol. E-mail: [iliwanda@lse.ac.uk](mailto:iliwanda@lse.ac.uk). I am grateful to the anonymous reviewers for their comments on earlier drafts of this article. Any errors that remain are my own.

<sup>1</sup> Ishmael Liwanda, ‘From one crisis to another? Economic responses to the Coronavirus pandemic’ (*The Radius*, 14 April 2020) <<https://theradius.eu/from-one-crisis-to-another-economic-responses-to-the-coronavirus-pandemic/>> accessed 28 February 2022.

<sup>2</sup> Shira Ovide, ‘How Big Tech Won the Pandemic’ *The New York Times* (12 October 2021) <[www.nytimes.com/2021/04/30/technology/big-tech-pandemic.html](http://www.nytimes.com/2021/04/30/technology/big-tech-pandemic.html)> accessed 28 February 2022.

<sup>3</sup> US Congress Subcommittee on Antitrust, Commercial and Administrative Law of the Committee of the Judiciary, ‘Investigation into Digital Markets’ (2020) 378.

introducing a set of far-reaching regulations to change the way Big Tech companies like MAGMA are regulated through the Digital Markets Act (DMA).<sup>4</sup>

In light of Brexit, the UK, primarily through the Competition and Markets Authority (CMA), is formulating a new regime to revamp its regulatory landscape as it relates to digital competition. As a consequence of Brexit, the UK is no longer subject to the EU supremacy principle,<sup>5</sup> and can embark on its own competition/antitrust policy. This presents a brilliant opportunity for the UK to lead the regulation of competition in digital markets. This will only be achieved if it constructs a regime that promotes the most effective forms of competition in digital markets.

This article will explore some of the proposed changes to the UK and the new EU competition regimes. It will argue that through the adoption of a modified consumer welfare standard—one that is informed by dynamic capabilities literature—it is possible and necessary to make the consumer welfare standard the guiding principle informing competition regulation in the digital sector. This piece will begin by addressing neo-Brandeisian calls for a more purposive competition law. It will then offer an analysis of the economics of competition in the digital sector, followed by an introduction to dynamic capabilities frameworks developed in strategic management literature. Through analysing the DMA and proposed changes to UK competition regulation in digital markets, it will demonstrate how literature on dynamic capabilities can enhance competition analysis and regulation, and help make antitrust fit for the digital world.

## A. RESISTING ‘HIPSTER’ ANTITRUST: A PROLOGUE

The digitalisation of our economies has resulted in spectacular benefits to billions around the world. This was exemplified by how quickly and effectively we were able to move much of our daily lives online during the onset of the COVID-19 pandemic. Digital markets are dynamic, with products and services (hereinafter, ‘products’) changing constantly. The pace of innovation in the digital sector can be electric. For instance, it took the popular social media app Instagram just eight weeks to acquire over a million users three months after launching in 2011.<sup>6</sup> This dynamism and pace of development acts as a double-edged sword. On the one hand, consumers stand to benefit from an ever-increasing array of products. However, regulators struggle to formulate and create rules for markets that are constantly changing.

<sup>4</sup> Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) (hereinafter, ‘DMA’).

<sup>5</sup> European Communities Act 1972, s 2(4); *R v Secretary of State for Transport, ex p Factortame (No 2)* [1991] 1 AC 603 (HL) 658–659.

<sup>6</sup> Big 3 Media, ‘A Brief History of Instagram And Its Rise To Popularity’ (*Big 3 Media*, 21 May 2021) <[www.big3.sg/blog/a-brief-history-of-instagram-and-its-rise-to-popularity](http://www.big3.sg/blog/a-brief-history-of-instagram-and-its-rise-to-popularity)> accessed 28 February 2022.

Numerous commentators have expressed concerns with existing regulatory regimes for digital competition. Khan for example, has argued that regulators lack the necessary toolkit to address perceived harms arising as a result of Big Tech's dominance.<sup>7</sup> She is correct in her assertions. Digital markets present a unique challenge for regulators and competition law more generally. A small number of firms enjoy extreme and largely unfettered levels of power and influence over the lives of billions. Meta's platforms boast over 3.6 billion monthly active users.<sup>8</sup> Alphabet and Apple run a duopoly in the UK mobile operating systems and app store markets.<sup>9</sup> Google has garnered a 90% market share in search advertising.<sup>10</sup> The enormous size of these technology Goliaths has caused many to believe that they are harming both competition and innovation in digital markets. With dominance, often comes the ability (and incentives) to abuse it. Google, for example, was fined by the Commission for abusing its dominant position by favouring its own search results over its competitors.<sup>11</sup> Amazon has in the past been accused of using data from business users to create clone products, as well as manipulating search results to promote its own products and undermine its rivals.<sup>12</sup> Concerns over the enormity of Big Tech companies, as well as some of their business practices, have led to a rejuvenation of age old debates surrounding the very purpose of competition law.

This is because the harms many antitrust commentators are concerned with go beyond the immediate impact of large digital platforms on competition. It has been argued that the rise of companies like Facebook, Amazon and Uber have increased misinformation and the polarisation of our polities,<sup>13</sup> decimated small

<sup>7</sup> Lina M Khan, 'Amazon's Antitrust Paradox' (2017) 126 *Yale Law Journal* 710.

<sup>8</sup> Felix Richter, 'Meta Reaches 3.6 Billion People Each Month' (*Statista*, 29 October 2021) <[www.statista.com/chart/2183/facebooks-mobile-users/](http://www.statista.com/chart/2183/facebooks-mobile-users/)> accessed 28 February 2022.

<sup>9</sup> Competition and Markets Authority (CMA), 'Apple and Google duopoly limits competition and choice' (*Gov.uk*, 14 December 2021) <[www.gov.uk/government/news/apple-and-google-duopoly-limits-competition-and-choice](http://www.gov.uk/government/news/apple-and-google-duopoly-limits-competition-and-choice)> accessed 28 February 2022.

<sup>10</sup> CMA, 'Online Platforms and Digital Advertising: Market Study Final Report' (Competition and Markets Authority 2020) <[https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final\\_report\\_Digital\\_ALT\\_TEXT.pdf](https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf)> accessed 23 March 2023.

<sup>11</sup> *Google Search (Shopping)* (Case COMP/AT.39740) Commission Decision 2018/C 9/08 [2017] OJ C9/11.

<sup>12</sup> Aditya Karla and Steven Stecklow, 'Amazon copied products and rigged search results to promote its own brands, documents show' *Reuters* (13 October 2021) <[www.reuters.com/investigates/special-report/amazon-india-rigging/](http://www.reuters.com/investigates/special-report/amazon-india-rigging/)> accessed 1 March 2022.

<sup>13</sup> Paul M Barrett, Justin Hendrix, and J Grant Sims, 'Fueling the Fire: How Social Media Intensifies U.S. Political Polarization — And What Can Be Done About It' (NYU Stern Center for Business and Human Rights 2021) <[https://static1.squarespace.com/static/5b6df958f8370af3217d4178/t/613a4d4cc86b9d3810cb35aa/1631210832122/NYU+CBHR+Fueling+The+Fire\\_FINAL+ONLINE+REVISED+Sep7.pdf](https://static1.squarespace.com/static/5b6df958f8370af3217d4178/t/613a4d4cc86b9d3810cb35aa/1631210832122/NYU+CBHR+Fueling+The+Fire_FINAL+ONLINE+REVISED+Sep7.pdf)> accessed 23 March 2023.

businesses,<sup>14</sup> and popularised precarious employer-worker relationships.<sup>15</sup> For critics like Pitofsky,<sup>16</sup> the dominance of large technology companies exemplifies the failings of competition law's focus on consumer welfare, an approach largely credited to the Chicago School. The promotion of the consumer welfare standard has become one of the main goals of competition law. For example, the CMA is obligated to 'promote competition, both within and outside the [UK], for the benefit of consumers'.<sup>17</sup> Consumer welfare, as conceptualised by proponents of the Chicago School, is predominantly price-centric.<sup>18</sup> Robert Bork, one of the Chicago School's most celebrated thinkers, defined consumer welfare as the sum of producer and consumer welfare. Bork's more economic, 'total welfare' approach to competition law analysis has been highly influential in the US and beyond.<sup>19</sup> For the past two decades, both the UK and the EU have both adopted a more economic approach to competition analysis. This is exemplified by the Commission's publication of the Priorities Paper in 2009,<sup>20</sup> where it called for a 'more economic approach'<sup>21</sup> to the application of abuse of dominance proceedings under article 102 of the Treaty on the Functioning of the European Union.<sup>22</sup>

## B. THE CONSUMER WELFARE STANDARD: JUST ABOUT PRICES?

While the more economic approach to competition law gained popularity throughout the 1990s and early 2000s, it would be an exaggeration to call it a 'consensus'. Khan, other neo-Brandeisians, and increasingly regulators are sceptical of the price-centric paradigm of consumer welfare. They argue that competition law's current focus on consumer welfare—particularly (short-term) price and output effects of competition—undermines effective antitrust enforcement because it delays any form of intervention in markets until market power is

<sup>14</sup> Stacy Mitchell and Ron Knox, 'Fact Sheet: How Amazon Exploits and Undermines Small Businesses, and Why Breaking It Up Would Revive American Entrepreneurship' (*Institute for Local Self-Reliance*, 16 June 2021) <<https://ilsr.org/fact-sheet-how-breaking-up-amazon-can-empower-small-business/>> accessed 18 April 2022.

<sup>15</sup> Amanda Peticca-Harris, Nadia deGama, and MN Ravishankar, 'Postcapitalist Precarious Work and Those in the 'Drivers' Seat: Exploring the Motivations and Lived Experiences of Uber Drivers in Canada' (2020) 27 *Organization* 36.

<sup>16</sup> Robert Pitofsky, 'The Political Content of Antitrust' (1979) 127 *University of Pennsylvania Law Review* 1051; Robert Pitofsky, *How the Chicago School Overshot the Mark: The effect of Conservative Economic Analysis on U.S. Antitrust* (Oxford University Press 2008) 1, 6.

<sup>17</sup> Enterprise and Regulatory Reform Act 2013, s 25.

<sup>18</sup> Robert H Bork, *The Antitrust Paradox: A Policy at War with Itself* (Free Press 1993).

<sup>19</sup> Richard Whish and David Bailey, *Competition Law* (10th edn, Oxford University Press 2020) 20–21.

<sup>20</sup> Commission, 'Communication from the Commission – Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' COM (2008) 832 final.

<sup>21</sup> Wouter PJ Wils, 'The Judgment of the EU General Court in Intel and the So-Called 'More Economic Approach' to Abuse of Dominance' (2014) 37 *World Competition* 405, 406.

<sup>22</sup> Consolidated Version of the Treaty on the Functioning of the European Union (TFEU) [2008] OJ C115/47.

actively being exercised, largely ignoring whether and how it is being acquired.<sup>23</sup> It fails to consider the wider societal effects of increased concentration, especially in digital markets, and on quality, innovation, and choice.<sup>24</sup> Neo-Brandeisians argue that competition law's focus on consumer welfare has rendered antitrust law and policy too restricted in scope, and has been unsuccessful in keeping markets open and competition free and fair.<sup>25</sup> A predominantly Chicago School approach to competition analysis presents, neo-Brandeisians contend, an 'impoverished understanding of corporate power'.<sup>26</sup> The neo-Brandeisian class calls for a recentring of the consumer welfare standard and competition law more generally to protecting the competitive process.<sup>27</sup> This entails a focus on addressing perceived defects of market structures to prevent competitive harms.<sup>28</sup>

Though renewed concern over market structures could potentially provide beneficial insights for competition analysis, the neo-Brandeisian attack goes beyond the protection of the competitive process. They argue for the expansion of the goals of competition law, moving away from a predominantly consumer welfare-based approach, and towards a more purposive regime;<sup>29</sup> an application of competition law incorporating concerns such as the link between economic concentration and the accumulation of political power,<sup>30</sup> or fair wages for workers.<sup>31</sup> However, neo-Brandeisian critiques of the current consumer welfare approach, in favour of a more purposive—and arguably political—competition law, are misguided. Firstly, it characterises the consumer welfare standard incorrectly as being squarely or predominantly concerned with price effects of conduct by dominant firms.<sup>32</sup> Secondly, it significantly underscores the successes that competition law's current consumer welfare paradigm has had over the past 20 years.<sup>33</sup>

In economic theory, consumer welfare is a measurement of the level of consumer surplus in a given market.<sup>34</sup> Consumer surplus refers to the difference

<sup>23</sup> Khan (n 7), 737.

<sup>24</sup> *ibid.*

<sup>25</sup> Lina M Khan and Sandeep Vaheesan, 'Market Power and Inequality: The Antitrust Counterrevolution and its Discontents' (2017) 11 *Harvard Law & Policy Review* 235; Lina M Khan, 'The New Brandeis Movement: America's Antimonopoly Debate' (2018) 9 *Journal of European Competition Law & Practice* 131, 131–132.

<sup>26</sup> Sandeep Vaheesan, 'The Twilight of the Technocrats' Monopoly on Antitrust?' (2018) 127 *Yale Journal Forum* 980, 990.

<sup>27</sup> Tim Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports 2018).

<sup>28</sup> Khan (n 7), 737; Tim Wu, 'The "Protection of the Competitive Process" Standard' (2018) Columbia Public Law Research Paper No 14-612 <[https://scholarship.law.columbia.edu/faculty\\_scholarship/2290](https://scholarship.law.columbia.edu/faculty_scholarship/2290)> accessed 23 January 2022.

<sup>29</sup> Khan (n 7) 739–740.

<sup>30</sup> *ibid.*

<sup>31</sup> Hiba Hafiz, 'Labour's Antitrust Paradox' (2020) 86 *University of Chicago Law Review* 381.

<sup>32</sup> Stefan Thomas, 'Normative Goals in Merger Control: Why Merger Control Should Not Attempt to Achieve 'Better' Outcomes than Competition' (SSRN 2021) <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3513098](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3513098)> accessed 23 January 2022.

<sup>33</sup> *ibid.*

<sup>34</sup> Pieter Kalbfleisch, 'Aiming for Alliance: Competition Law and Consumer Welfare' (2011) 2 *Journal of European Competition Law & Practice* 108, 111.

between the price customers would be willing to pay for a given quantity, and the actual price paid for the quantity.<sup>35</sup> The greater the delta, the larger the level of consumer surplus. Competition amongst firms tends to increase the delta. This is because competition tends to drive down prices. However, as is sometimes misunderstood by neo-Brandeisians,<sup>36</sup> consumer welfare is not, even exclusively or overwhelmingly, concerned with price effects. For instance, the aforementioned delta can grow if consumers' willingness to pay rises. This could be due to innovations in a product increasing its utility, thus making it more desirable for customers to purchase them.

The explosion of the smartphone market illustrates this. Over the past two decades, smartphones have enjoyed an exponential increase in their complexity and functionality, becoming a near necessity for the digital age.<sup>37</sup> Consequently, some consumers have been seemingly willing to pay more for smartphones. For instance, Apple's first iPhone sold for \$499 in 2007.<sup>38</sup> A recent study found that some consumers in the US were willing to pay up to \$2,400 for the latest iPhone.<sup>39</sup> Therefore, price increases are not the only way through which consumer welfare can be or is measured by competition regulators. This is acknowledged under EU and UK competition law. In the context of merger review, a concentration can be blocked if it is found to cause a significant impediment to effective competition or a substantial lessening of competition respectively.<sup>40</sup> In *Microsoft/LinkedIn*, the Commission considered data theories of harm arising from the merger.<sup>41</sup> When deciding to block a merger by Sabre and Farelogix, the CMA considered the impact of innovation and loss of competition in its analysis.<sup>42</sup> The parties unsuccessfully attempted to appeal the decision on jurisdictional grounds.<sup>43</sup> This shows that the consumer welfare standard can and does have the capacity to take into considerations factors beyond price effects.

Moreover, neo-Brandesian critiques on the consumer welfare standard fail to properly acknowledge the successes that the economic approach to competition analysis has had over the past two decades. By putting the consumer at the heart

<sup>35</sup> *ibid.*

<sup>36</sup> Khan (n 7).

<sup>37</sup> Simon O'Dea, 'Number of smartphone subscriptions worldwide from 2016 to 2027' (*Statista*, 23 February 2022) <[www.statista.com/statistics/330695/number-of-smartphone-users-worldwide](http://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide)> accessed 28 February 2022.

<sup>38</sup> BBC News, 'How Apple's iPhone has changed through the years' (*BBC News*, 28 June 2019) <[www.bbc.co.uk/news/newsbeat-47056309](http://www.bbc.co.uk/news/newsbeat-47056309)> accessed 28 February 2022.

<sup>39</sup> Simon-Kucher & Partners, 'Simon-Kucher & Partners Study Reveals Consumers Willing to Pay Up to \$2,400 for New iPhone' (*Simon-Kucher*, 9 September 2019) <[www.simon-kucher.com/en-gb/about/media-center/simon-kucher-partners-study-reveals-consumers-willing-pay-2400-new-iphone](http://www.simon-kucher.com/en-gb/about/media-center/simon-kucher-partners-study-reveals-consumers-willing-pay-2400-new-iphone)> accessed 2 March 2022.

<sup>40</sup> TFEU (n 22), art 2(2); Enterprise Act 2002, ss 22, 35 (completed mergers); ss 33, 36 (anticipated mergers).

<sup>41</sup> *Microsoft/LinkedIn* (Case COMP/M.8124) Commission Decision [2016] OJ C388/04, paras 176–177.

<sup>42</sup> CMA, 'Anticipated acquisition by Sabre Corporation of Farelogix, Inc.: Final Report' (CMA 9 April 2020) 6 <[https://assets.publishing.service.gov.uk/media/5e8f17e4d3bf7f4120cb1881/Final\\_Report\\_-\\_Sabre\\_Farelogix.pdf](https://assets.publishing.service.gov.uk/media/5e8f17e4d3bf7f4120cb1881/Final_Report_-_Sabre_Farelogix.pdf)> accessed 23 March 2023.

<sup>43</sup> *Sabre Corporation v Competition and Markets Authority* [2021] CAT 11.

of competition analysis,<sup>44</sup> competition law and policy has been largely triumphant in developing both economic and legal frameworks for analysing competition, protecting consumers while providing businesses much needed and appreciated certainty and clarity over what conduct is lawful and expected of them.<sup>45</sup> It has provided regulators with the political independence to formulate policy that encourages competition for the benefit of consumers, restricting and resisting the pernicious effects of the over-politicization of competition law that will be discussed below.

Take, for example, the pre-Brexit EU merger decisions *Bayer/Monsanto* and *Siemens/Alstom*.<sup>46</sup> *Bayer* was a Commission merger decision concerning a German chemical company's proposed acquisition of the American agrochemical company Monsanto.<sup>47</sup> Third parties attempted to petition the Commission to block the merger, citing concerns over climate change, food safety and environmental degradation.<sup>48</sup> Though the Commission did not yield to the aforesaid concerns, the intense public scrutiny surrounding *Bayer* demonstrates the popularity and potency that the movement against the economic approach to competition analysis, in favour of the incorporation of normative and consideration goals in competition law, has both in the political and academic space.

Normativity extends beyond generally desirable social goals like climate change mitigation or food safety. In *Siemens*, the Commission's decision to prohibit the merger garnered criticism from German and French governments.<sup>49</sup> They contended that the Commission failed to adequately consider the wider industrial interests of the bloc, especially in competing against highly subsidised Chinese

<sup>44</sup> Warwick Lightfoot, 'Putting consumer welfare at the heart of competition policy and market regulation' (*Policy Exchange*, 18 October 2019) <<https://policyexchange.org.uk/putting-consumer-welfare-at-the-heart-of-competition-policy-and-market-regulation/>> accessed 2 March 2022.

<sup>45</sup> Thomas (n 32).

<sup>46</sup> *Bayer/Monsanto* (Case COMP/M.8084) Commission Decision [2018] OJ C459/19; *Siemens/Alstom* (Case COMP/M.8677) Commission Decision [2019] OJ C300/05.

<sup>47</sup> Drew Harwell, 'Bayer agrees to buy Monsanto in \$66 billion deal that could reshape agriculture' *The Washington Post* (14 September 2016) <[www.washingtonpost.com/business/economy/bayer-agrees-to-buy-monsanto-in-66-billion-deal-that-could-reshape-agriculture/2016/09/14/4599de48-7aa6-11e6-ac8e-cf8e0dd91dc7\\_story.html](http://www.washingtonpost.com/business/economy/bayer-agrees-to-buy-monsanto-in-66-billion-deal-that-could-reshape-agriculture/2016/09/14/4599de48-7aa6-11e6-ac8e-cf8e0dd91dc7_story.html)> accessed 2 March 2022.

<sup>48</sup> European Commission, 'Mergers: Commission opens in-depth investigation into proposed acquisition of Monsanto by Bayer' (*European Commission*, 22 August 2017) <[https://ec.europa.eu/commission/presscorner/detail/en/IP\\_17\\_2762](https://ec.europa.eu/commission/presscorner/detail/en/IP_17_2762)> accessed 24 March 2022; Carlo Motta, 'The EU clears Bayer-Monsanto merger amid wide competition and environmental concerns' *The European Sting* (27 March 2018) <<https://europeansting.com/2018/03/27/the-eu-clears-bayer-monsanto-merger-amid-wide-competition-and-environmental-concerns/>> accessed 2 March 2022; Zlata Rodionova, 'Thousands protest against seed giant Monsanto ahead of Bayer merger' *The Independent* (23 May 2016) <[www.independent.co.uk/news/business/news/thousands-protest-against-evil-seed-giant-monsanto-ahead-of-bayer-merger-a7043196.html](http://www.independent.co.uk/news/business/news/thousands-protest-against-evil-seed-giant-monsanto-ahead-of-bayer-merger-a7043196.html)> accessed 2 March 2022.

<sup>49</sup> French Government, 'The European Commission's decision on the Alstom-Siemens merger throws the need to revise competition law into sharp focus' (*Gouvernement.fr*, 8 February 2019) <[www.gouvernement.fr/en/the-european-commission-s-decision-on-the-alstom-siemens-merger-throws-the-need-to-revise](http://www.gouvernement.fr/en/the-european-commission-s-decision-on-the-alstom-siemens-merger-throws-the-need-to-revise)> accessed 3 March 2022; Thomas (n 32) 8–9; Leigh Thomas, 'Germany step up pressure over Alstom-Siemens deal' *Reuters* (21 January 2019) <[www.reuters.com/article/us-alstom-m-a-siemens-idUSKCN1PF0PK](http://www.reuters.com/article/us-alstom-m-a-siemens-idUSKCN1PF0PK)> accessed 2 March 2022.

train production.<sup>50</sup> The French, German and Polish governments subsequently co-authored an initiative to reform EU merger policy. This was instigated with a view to make the Commission consider the EU industrial policy when applying competition law.<sup>51</sup> The proposal entailed the establishment of a ‘Competitiveness Council’ that was to guide the Commission’s merger enforcement ‘strategy’. The said strategy would be shaped at ‘a political level... in agreement with the respective Presidency’.<sup>52</sup> Though these proposals again never progressed beyond the realm of political deliberation and rhetoric, they are indicative of the perniciousness of good faith attempts to bring modern antitrust within the ambit of politics. More importantly, the failures of both the activists in *Bayer* and the German and French governments in *Siemens* highlight a particular strength of the political agnosticism that the existing competition regime affords to competition regulators. It empowers them to make decisions largely free from political considerations, to engage in objective assessments of the impact of a merger or conduct on competition in defined markets. It enables competition analysis to be focused on promoting competition, and not protecting special interests.<sup>53</sup>

### C. PROTECTING THE PROCESS OF COMPETITION? A HIGHWAY TO HELL

It is often said that the road to hell is paved with good intentions.<sup>54</sup> The maxim applies to neo-Brandeisian attempts to shift the focus of competition policy from the consumer welfare paradigm to a focus on the competitive process.<sup>55</sup> They argue that, because of competition law’s apparent fixation on price effects, a greater focus on market structures and the protection of the process of competition will aid in addressing the inadequacies of the consumer welfare paradigm.<sup>56</sup> Though admirable is the suggestion to rectify perceived issues with the existing consumer welfare standard, such an approach to competition law is bound to cloud competition analysis or open it up to (greater) political interference.

For neo-Brandeisians, a paradigm shift in antitrust’s focus from consumer welfare to the protection of the competitive process, *inter alia*, would entail the examination of the arena wherein competition takes place. This would require the adoption of a framework incorporating the notion that a company’s ‘power and the potential anticompetitive nature of that power’<sup>57</sup> cannot be properly discerned without an analysis of the ‘structure of a business and the structural role it plays in

<sup>50</sup> Peter Altmaier, Bruno Le Maire, and Jadwiga Emilewicz, ‘Modernising EU Competition Policy’ (Bundesministerium für Wirtschaft und Klimaschutz 4 July 2019) <[www.bmwi.de/Redaktion/DE/Downloads/M-O/modernising-eu-competition-policy.pdf?\\_\\_blob=publicationFile](http://www.bmwi.de/Redaktion/DE/Downloads/M-O/modernising-eu-competition-policy.pdf?__blob=publicationFile)> accessed 3 March 2022.

<sup>51</sup> Thomas (n 32) 7.

<sup>52</sup> Altmaier, Le Maire, and Emilewicz (n 50) 3.

<sup>53</sup> Thomas (n 32); Bork (n 18).

<sup>54</sup> Henry G Bohn, *A Hand-Book of Proverbs* (London 1855) 514.

<sup>55</sup> Wu (n 27) 138.

<sup>56</sup> *ibid.*

<sup>57</sup> Khan (n 7) 717.



markets'.<sup>58</sup> By protecting the competitive process, neo-Brandeisians argue, regulators and judges would not be unnecessarily chained to 'achieve welfare outcomes that [they] are too ill-equipped to measure'.<sup>59</sup> A focus on the competitive process would empower competition regulators and enforcers to protect the 'competitive process that... rewards firms with better products'.<sup>60</sup>

Such proposals are flawed for several reasons. Firstly, they assume that competition, for its own sake, in all contexts, is inherently valuable and thus must be protected. Take Amazon for example. Though having greater competition in the e-commerce space, or the emergence of a bona fide rival to Amazon may be favourable from a normative perspective, it is not necessarily the most efficient, or feasible economic outcome. Amazon is not just an e-commerce company, but acts as a large digital platform ecosystem, operating as an intermediary, connecting businesses and consumers,<sup>61</sup> while competing with business users, equipped with one of the world's most sophisticated logistics networks.<sup>62</sup> The promotion of rivalrous competition, whereby the 'competitive process' is protected with the aim for merchants to, at some point, compete with Amazon, would require a 'duplication' of fixed costs that would be uneconomical.<sup>63</sup> Yet, under the neo-Brandeisian axiom of protecting the competitive process, such an erroneous policy would be deemed reasonable, irrespective of its unfeasibility.

Secondly, such proposals assume that such a focus on the process of competition would be easier to measure, and less fraught with difficulty, than the existing consumer welfare paradigm. Liberal, market-based economies are underpinned by a baseline freedom to engage in enterprise unimpeded. Restrictions on free enterprise are tolerated in so far as they are justified to achieve a negotiated, distributive justice.<sup>64</sup> Therefore, in the formulation of any policy, there must be a balancing act between freedoms, such that of unimpeded enterprise, with others, like the prevention of abusive conduct by dominant undertakings. Yet, it is not clear how conflicting freedoms would be balanced under a neo-Brandeisian framework.<sup>65</sup> Making the protection of the competitive process the central focus of

<sup>58</sup> *ibid.*

<sup>59</sup> Tim Wu, 'After Consumer Welfare, Now What? The "Protection of Competition" Standard in Practice' (2018) Columbia Public Law Research Paper No 14-608 <[https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3294&context=faculty\\_scholarship](https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=3294&context=faculty_scholarship)> accessed 2 March 2022.

<sup>60</sup> *ibid.*

<sup>61</sup> Benjamin Edelman, 'Mastering the Intermediaries' (*Harvard Business Review*, June 2014) <<https://hbr.org/2014/06/mastering-the-intermediaries>> accessed 1 April 2022; Karen Webster, 'Say Hello To The New Retail Intermediary' (*PYMNTS.COM*, 17 July 2017) <[www.pymnts.com/news/retail/2017/ecommerce-giant-amazon-replaces-walmart-as-the-new-intermediary-of-retail/](http://www.pymnts.com/news/retail/2017/ecommerce-giant-amazon-replaces-walmart-as-the-new-intermediary-of-retail/)> accessed 3 March 2022.

<sup>62</sup> Brian Connolly, 'How the Amazon Supply Chain Works' (*Jungle Scout*, 25 March 2021) <[www.junglescout.com/blog/amazon-supply-chain/](http://www.junglescout.com/blog/amazon-supply-chain/)> accessed 3 March 2022.

<sup>63</sup> Nicholas Petit and Phillip Hanspach, 'The European Union's Big Policy Bet Against the Tech Giants' (*Oxford Business Law Blog*, 3 December 2021) <[www.law.ox.ac.uk/business-law-blog/blog/2021/12/european-unions-big-policy-bet-against-tech-giants](http://www.law.ox.ac.uk/business-law-blog/blog/2021/12/european-unions-big-policy-bet-against-tech-giants)> accessed 3 March 2022.

<sup>64</sup> Herbert Hovenkamp, 'Distributive Justice and the Antitrust Laws' (1982) 51 *George Washington Law Review* 1.

<sup>65</sup> Stefan Thomas (n 32) 16–17.

competition policy does not answer difficult questions such as whether the impact of competition on consumers is more important than—as was the case in *Siemens*—an economy’s industrial policy.

The lack of a sufficiently elaborated mechanism for balancing conflicting interests in the neo-Brandeisian approach makes it vulnerable to over-politicisation.<sup>66</sup> It is no secret that political interests permeate throughout competition law and policy. The economic approach and consumer welfare paradigm are a demonstration of the triumph and influence of neoliberal thought in law and economics in the last couple of decades.<sup>67</sup> The consumer welfare paradigm limits the influence of politics and special interests from competition law. It enables regulators in cases like the Commission in *Bayer* and *Siemens* to largely insulate themselves from the pressures of governments and activists, and hone in on an assessment of the impact of a merger on consumers.<sup>68</sup>

This insulation assists regulators in avoiding difficult and distracting political and normative questions that would flow from the adoption of a more purposive, neo-Brandeisian analysis of antitrust focused on protecting the amorphous concept of the ‘process of competition’. Which stakeholder interests would be considered worth incorporating into this new paradigm and which ones would not? Surely environmental or health concerns, as well as labour rights, and matters of national and economic security ought to be important considerations to consider when engaging in competition analysis.<sup>69</sup> The possibilities for conflicts are endless. The path to the realisation of neo-Brandeisian competition is meandering and uncertain. The highway to hell is, on the other hand, guaranteed. Political interests would find it easier to influence the application of competition law in all markets. Certainty, a crucial component of well-functioning markets, would be thrown out of the window. Yet such risks are downplayed by the neo-Brandeisians, holding onto the argument that the consumer welfare standard is simply not fit for purpose.

The road to hell may be laden with good intentions, but that does not mean that the path is without usefulness. Many of the neo-Brandeisian critiques of the consumer welfare standard are justified and valid, especially in the realm of digital markets. However, their solutions, such as the blind protection of the competitive process, underlie a misunderstanding of the nature of competition in digital markets.

<sup>66</sup> *ibid* 21–22.

<sup>67</sup> Hubert Buch-Hansen and Angela Wigger, ‘Revisiting 50 years of market-making: The neoliberal transformation of European competition policy’ (2010) 17 *Review of International Political Economy* 20.

<sup>68</sup> *Bayer/Monsanto* (n 46); *Siemens/Alstom* (n 46).

<sup>69</sup> Thomas (n 32); Ioannis Lianos and Dmitry Katalevsky, ‘Merger Activity in the Factors of Production Segments of the Food Value Chain: - A Critical Assessment of the Bayer/Monsanto merger’ (2017) Centre for Law, Economics and Society Policy Paper Series: 2017/1 <[https://discovery.ucl.ac.uk/id/eprint/10045082/1/Lianos\\_cles-policy-paper-1-2017.pdf](https://discovery.ucl.ac.uk/id/eprint/10045082/1/Lianos_cles-policy-paper-1-2017.pdf)> accessed 4 March 2022.

## II. RECONCEPTUALISING THE COMPETITION ECONOMICS OF DIGITAL PLATFORM ECOSYSTEMS

Much of contemporary neo-Brandeisian literature focuses on digital markets to highlight the severe limitations of a consumer welfare approach. For example, Khan analyses the USA's antitrust framework, which, like the UK and EU regimes, relies predominantly on the price-centric, consumer welfare standard in competition analysis.<sup>70</sup> Others have analysed digital markets more generally to lay bare the chasm between the competition dynamics that exist in digital markets and the application of antitrust laws in said markets.<sup>71</sup>

Neo-Brandeisians, among others, are correct in that competition law and policy needs, in some respects, a more robust understanding of competition in digital markets. It may in fact be true that the legal and economic tools of yesteryear are proving to be unsatisfactory companions in the journey to understand and deal with novel issues presented by Big Tech and digital markets more generally. But that does not mean we are completely lacking in tools to deal with the digital sector. There exists a large and growing body of economic and legal literature on digital markets, especially in relation to MAGMA. This section will present an analysis of competition in digital markets, with a focus on the role of dynamic competition, and how dynamic capabilities frameworks can better equip competition authorities with the factual toolkits they need to analyse competition in ever-changing, digital markets.

### A. THE ECONOMICS OF DIGITAL MARKETS: INTRODUCING DIGITAL PLATFORM ECOSYSTEMS

There has been considerable literature and research on the economics of digital markets. It is now well-known that digital markets are characterised by several features which coalesce to accentuate the unique competition dynamics present in the digital sector. For instance, both the Furman and Crémer Reports on digital markets,<sup>72</sup> commissioned by the UK and EU respectively, note that the presence of strong network effects and extreme returns to scale mean that such markets are often winner-take-all.<sup>73</sup> Firms are in fierce competition *for* the market,

<sup>70</sup> Khan (n 7).

<sup>71</sup> John M Newman, 'Antitrust in Digital Markets' (2019) 72 *Vanderbilt Law Review* 1497.

<sup>72</sup> Digital Competition Expert Panel, 'Unlocking Digital Competition: Report of the Digital Competition Expert Panel' (Digital Competition Expert Panel 2019) (henceforth, 'Furman Report'); Jacques Crémer Yves-Alexandre de Montjoye Heike Schweitzer, 'Competition Policy for the Digital Era' (European Commission 2019) (henceforth, 'Crémer Report') 24.

<sup>73</sup> Antonio Robles Martin-Laborda, 'Merger Control and Online Platforms: The Relevance of Network Effects' (2017) 1 *Market and Competition Law Review* 69.

as opposed to a mere segment of it. This is the case for many technology start-ups and companies.<sup>74</sup>

To attain the spectacular profits and market power that result from strong network effects and economies of scale, firms must de facto own a market.<sup>75</sup> Google for example enjoys an estimated 92% of the search engine market in both the United Kingdom and internationally.<sup>76</sup> This near total domination of the search engine market provides Google with the requisite financial firepower for developing and expanding its ecosystem. For companies in the digital sectors, winning the competition for the market means more customers and opportunities for expansion.<sup>77</sup>

Usually, winning competition for the market enables digital platforms to enjoy strong network effects—which refer to the increased utility users accrue from using a platform or product as more users join the platform. Once these are gained, digital platforms can unlock the competitive advantages that can be acquired from large datasets. Data is a ‘key ingredient’ to products such as AI, machine learning or other smart services.<sup>78</sup> They are critical for the operation of complex logistics networks or personalised/targeted marketing. Owning and being able to turn data into a competitive advantage can help cement a digital firm’s dominance in a market.<sup>79</sup>

It is thus the coalescence of strong network effects, extreme returns to scale and the role of data that can create formidable business models in which consumers have a low proclivity to switching services.<sup>80</sup> Even in situations where users would be better off using a new platform, they would have little to no individual incentive to migrate away from an incumbent platform. Whether they choose to migrate depends on their expectations that others will follow.<sup>81</sup> Network effects, coupled with the competitive advantages of having access to large volumes of data, can make it very difficult for new market entrants to dislodge.<sup>82</sup>

<sup>74</sup> Elena Argentesi, and others, ‘Ex-post Assessment of Merger Control Decisions in Digital Markets’ (Lear 2019) 10 <[www.learlab.com/publication/ex-post-assessment-of-merger-control-decisions-in-digital-markets/](http://www.learlab.com/publication/ex-post-assessment-of-merger-control-decisions-in-digital-markets/)> accessed 3 March 2022.

<sup>75</sup> Çağlagül Koz, ‘Searching for a New Theory of Harm for Startup Acquisitions by Digital Ecosystems: A Review of the EU Merger Control Regime’ (2018/19) MIPLC Master Thesis Series <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3702200](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3702200)> accessed 23 March 2023.

<sup>76</sup> StatCounter, ‘Search Engine Market Share Worldwide’ (*StatCounter*) <<https://gs.statcounter.com/search-engine-market-share>> accessed 16 April 2022.

<sup>77</sup> Çağlagül Koz (n 75) 9, 24; Argentesi and others (n 74).

<sup>78</sup> Crémer Report (n 72) 24.

<sup>79</sup> Crémer Report (n 72), 24; Khan (n 7); Newman (n 71) 1501.

<sup>80</sup> Newman (n 71) 1507–1508.

<sup>81</sup> Crémer Report (n 72) 36.

<sup>82</sup> Lina M Khan, ‘Sources of Tech Platform Power’ (2018) 2 *Georgia Law Technology Review* 325, 329.

## B. A CRASH COURSE ON THE IMPORTANCE OF DIGITAL PLATFORM ECOSYSTEMS

In digital markets, it does increasingly seem like the firms best placed to enjoy the opportunity created by the fusion of network effects, economies of scale and data are digital platform ecosystems. However, the conceptualisation of Big Tech companies as platform ecosystems remain an underexplored, yet crucial component of attaining a proper understanding of the competition dynamics of digital markets.<sup>83</sup> The ecosystem model is used by all MAGMA companies and forms a critical component of their business models.

The primary reason behind the popularity of the ecosystem model among MAGMA companies is that it helps them capitalise on the psychological dynamics of consumers in digital markets. The internet is a vast domain, buzzing with more information than the average user can ever reasonably process.<sup>84</sup> The presence of information overload means that there is strong demand for digital portals,<sup>85</sup> and companies that filter through the vast array of information available on the internet, reducing the cognitive burden of access information and services online.<sup>86</sup> Firms who provide the ‘lowest-cognitive-burden’ digital portal services have been the most successful.<sup>87</sup>

And just as there exists a cognitive burden among users in filtering through information on the internet, cognitive burdens affect the propensity for users to choose and switch between different portals.<sup>88</sup> This phenomenon thus gives digital platforms who achieve market dominance a competitive advantage amplified by users’ propensities to switch between platforms.<sup>89</sup> This aversion to switching creates strong incentives for digital platforms to attract as many users as possible in the shortest time possible, as this gives them the best chance of achieving the extreme returns to scale present in digital markets.

Therefore, as digital platforms grow, they create various portals through which they can capture potential users, as well as keep current users within their ecosystem.<sup>90</sup> Take Alphabet Inc. for example. It is more than an internet search

<sup>83</sup> Çağlagül Koz (n 75); Yong Lim, ‘Tech Wars: Return of the Conglomerate – Throwback or Dawn of a New Series for Competition in the Digital Era?’ (2020) 19 *Journal of Korean Law* 47; Furman Report (n 76) para 1.106.

<sup>84</sup> Ellen P Goodman, ‘Media Policy Out of the Box: Content Abundance, Attention Scarcity, and the Failures of Digital Markets’ (2004) 19 *Berkeley Technology Law Journal* 1389, 1467; Adam Candeub, ‘Behavioural Economics, Internet Search, and Antitrust’ (2014) 9 *I/S: A Journal of Law and Policy for the Information Society* 407, 411.

<sup>85</sup> Çağlagül Koz (n 75) 19.

<sup>86</sup> Mark R Patterson, *Antitrust Law In The New Economy: Google Yelp, LIBOR, And The Control of Information* 37 (Harvard University Press 2018); Khan (n 82) 326.

<sup>87</sup> Newman (n 71) 1506.

<sup>88</sup> Newman (n 71) 1507; Candeub (n 84), 410.

<sup>89</sup> Candeub (n 84); Paul T Moura, ‘The Sticky Case of Sticky Data: An Examination of the Rationale, Legality, and Implementation of a Right to Data Portability Under European Competition Law’ (MSc Dissertation, London School of Economics 2014).

<sup>90</sup> Newman (n 71), 1509.

company. It owns Google Search, the popular video streaming platform YouTube, has a navigation service, Google Maps, and has recently acquired the electronics and fitness company Fitbit.<sup>91</sup> Alphabet's various arms provide it with multiple portals to entice and retain users within their ecosystem. The more services Alphabet can provide to its users, the less they need to venture out to other platforms to access services, and the greater the cognitive burden they get from attempting to do so. This helps further entrench its leading position in the internet search market. These portals provide Alphabet with access to a vast array of users, enabling it to extract a range of personal data at scale. This aids Alphabet in improving its services at a pace and scale that its rivals are unable to match. Ecosystems provide digital platforms with a proven business model to fully realise the extreme returns to scale that the convergence of data, network effects and multi-sided market structures effectively guarantee.

### C. OPENING COMPETITION ECONOMICS' 'BLACK BOX': INTRODUCING THE THEORY OF THE (INNOVATING) FIRM

The proliferation of the ecosystem model in the digital sector has resulted in digital conglomerates that have built near impenetrable business models, making it very difficult for firms to directly compete with them. Smaller firms looking to compete with a company like Amazon directly would have to contend with a digital Goliath armed with strong competitive capabilities in several areas. The formulation of competition policy with such outcomes would result in severely ineffective antitrust regulation and enforcement. Consequently, the creation of a regulatory framework that promotes effective competition in digital markets requires a rethink of how firms compete and innovate, especially in the digital sector.

Unfortunately, contemporary competition analysis, whether applied through a Chicago School or neo-Brandeisian lens, is heavily influenced by and reliant on industrial economics.<sup>92</sup> The industrial economic model relies primarily upon static competition analysis.<sup>93</sup> This entails a set of firms competing for economic profits (rents).<sup>94</sup> Under a static competition model, firms compete for

<sup>91</sup> Tim Bradshaw, 'Google Takes on Apple with \$2.1bn deal to buy Fitbit' *Financial Times* (1 November 2019) <[www.ft.com/content/f6a710b4-fca5-11e9-a354-36acbbb0d9b6](http://www.ft.com/content/f6a710b4-fca5-11e9-a354-36acbbb0d9b6)> accessed 4 March 2022; Inbal Orpaz, 'Google Confirms Acquisition of Israeli Navigation App Waze' *Haaretz* (11 June 2013) <[www.haaretz.com/israel-news/business/.premium-google-confirms-billion-waze-acquisition-1.5277715](http://www.haaretz.com/israel-news/business/.premium-google-confirms-billion-waze-acquisition-1.5277715)> accessed 4 March 2022; Andrew Ross Sorkin and Jeremy W Peters, 'Google to Acquire YouTube for \$1.65 Billion' *The New York Times* (9 October 2006) <[www.nytimes.com/2006/10/09/business/09cnd-deal.html](http://www.nytimes.com/2006/10/09/business/09cnd-deal.html)> accessed 4 March 2022.

<sup>92</sup> Oliver Budzinski, 'Modern Industrial Economics and Competition Policy: Open Problems and Possible Limits' in Josef Drexler, Wolfgang Kerber, and Rupprecht Podszun (eds) *Competition Policy and the Economic Approach: Foundations and Limitations* (Edward Elgar Publishing 2011).

<sup>93</sup> Nicholas Petit and David J Teece, 'Innovating Big Tech Firms and Competition Policy: Favoring Dynamic over Static Competition' (2021) 30 *Industrial and Corporate Change* 1168, 1173.

<sup>94</sup> *ibid* 1170.

existing rents.<sup>95</sup> Firms are assumed to be largely homogenous in their product offering. To compete, they supply near-perfect substitutes, and rivalry in such markets consists of undertakings engaging in, for example, price decreases and cost-cutting strategies.<sup>96</sup>

The static competition model fails to provide a useful framework to analyse competition in digital markets. The existence of strong network effects, extreme returns to scale and data as a competitive advantage incentivises competition for the market. To capture the supernormal profits that make digital markets so lucrative, firms must dominate their respective markets. Competition is for *future* rents. The promise of future supernormal profits is what attracts human, financial, and technological capital into digital markets.<sup>97</sup> Take for instance Uber, the ride-hailing company who, long before it was able to turn a profit, received over \$23 billion in funding,<sup>98</sup> primarily on the expectation that it would be able to dominate the nearly \$50 billion taxi industry in the US alone.<sup>99</sup> It is through understanding the economic rationales behind this seemingly irrational pursuit of the promise of future rents can we truly understand the digital sector. And through the use of dynamic competition analysis do we begin to dissect the logic and mechanics of future rent seeking in digital markets.

The dynamic competition model characterises competition for future rents as one whereby innovation and the development of new products, processes, and services as being the main way firms attain and maintain long-term competitive advantages.<sup>100</sup> In order to acquire these long-term competitive advantages, firms must develop dynamic capabilities. In management literature, dynamic capabilities refer to 'higher-level' actions that equip firms with the requisite competences to engage in 'high-payoff' activities.<sup>101</sup> This contrasts with ordinary capabilities, which entail the performance of 'administrative, operational and governance-related functions' that are required to keep enterprises performing basic tasks.<sup>102</sup>

The development of dynamic capabilities by enterprises to compete in digital markets is necessarily an evolutionary, long-term process.<sup>103</sup> To compete in

<sup>95</sup> *ibid.*

<sup>96</sup> *ibid.*

<sup>97</sup> Devin Reilly, D Daniel Sokol and David Toniatti, 'The Importance of Exit via Acquisition to Venture Capital, Entrepreneurship, and Innovation' (2023) 32 *Minnesota Journal of International Law* 160.

<sup>98</sup> Craft, 'Uber Funding Rounds, Valuation and Investors' (*Craft*) <<https://craft.co/uber/funding-rounds>> accessed 29 March 2022.

<sup>99</sup> Elena Mazareanu, 'Size of the Taxi and Limousine Services Market in the U.S. between 2018 and 2021' (*Statista*, 13 April 2022) <[www.statista.com/statistics/1174077/taxi-limousine-services-market-size-us/#statisticContainer](https://www.statista.com/statistics/1174077/taxi-limousine-services-market-size-us/#statisticContainer)> accessed 29 March 2022.

<sup>100</sup> Petit and Teece (n 93) 1170.

<sup>101</sup> David J Teece, 'The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms' (2014) 28 *Academy of Management Perspectives* 328.

<sup>102</sup> *ibid.*

<sup>103</sup> Petit and Teece (n 93).

digital markets, companies typically engage in the Schumpeterian, innovative process of ‘creative destruction’,<sup>104</sup> launching new products, services, and processes into their respective markets to win the race for future rents.<sup>105</sup> As Petit and Teece note, this is achieved through a variety of methods such as product differentiation, integration, or diversification.<sup>106</sup> Such processes are usually developed ‘organically’.<sup>107</sup> In digital markets, enterprises orchestrate assets such as data to provide value to end users in platform ecosystem models. This is not an easy process. To achieve this, companies must cope with high levels of uncertainty, combining and managing existing firm resources to develop, maintain or extend their competitive advantage(s). This requires ‘managerial acumen’ and entrepreneurial ability.<sup>108</sup> Competitive advantages are gained by firms’ abilities to creatively integrate existing technology, data science and commercial ingenuity.<sup>109</sup>

Static competition analysis fails to account for presence of the above factors in digital competition. Such an analysis ignores the crucial role that ‘managers, organisational arrangements, and complex contracting’ play in dynamically competitive markets.<sup>110</sup> Digital competition, analysed through the lens of dynamic capabilities frameworks and drawing on insights from management literature, can enrich competition law with the analytical tools necessary to understand competition in digital markets. Particularly, dynamic capabilities analyses provide a strong case for a shift toward long-term consumer welfare, due to competition in digital markets primarily being for future rents,<sup>111</sup> as well as incorporating firm heterogeneity into competition analysis.

Time is an important factor in the dynamically competitive environments that typify digital markets. The development of dynamic capabilities takes time, and therefore competition analysis needs to account for this. The recognition of firm heterogeneity necessitates a dive into economics’ ‘black box’.<sup>112</sup> Enterprises, especially in digital markets must be viewed as ‘repositories’ of dynamic capabilities, and their behaviour assessed accordingly.<sup>113</sup> Therefore, a firm’s research and development capabilities, labour force and other inputs that are business-specific should be central when analysing a firms’ dynamic capabilities in any dynamic competition analysis.<sup>114</sup> By adopting a long-term consumer welfare paradigm that acknowledges firm heterogeneity in digital markets, it provides a useful starting point to begin to separate short-term conduct that is rational from an ‘income

<sup>104</sup> Joseph A Schumpeter, *Capitalism, Socialism and Democracy* (Routledge, 1994) 82–83; Thomas McCraw, *Prophet of Innovation: Joseph Schumpeter and Creative Destruction* (Harvard University Press 2007) 7.

<sup>105</sup> Petit and Teece (n 93) 1170.

<sup>106</sup> *ibid.*

<sup>107</sup> Petit and Teece (n 93) 1184; David J Teece, ‘Explicating Dynamic Capabilities: The nature and Micro-Foundations of (Sustainable) Enterprise Performance’ (2007) 28 *Strategic Management Journal* 1319.

<sup>108</sup> Petit and Teece (n 93), 1179, 1170.

<sup>109</sup> *ibid* 1180.

<sup>110</sup> *ibid* 1176.

<sup>111</sup> *ibid* 1181–1182.

<sup>112</sup> *ibid* 1176.

<sup>113</sup> *ibid* 1184.

<sup>114</sup> *ibid.*



statement' perspective,<sup>115</sup> from actions which are rational from a medium- to long-term, innovation-focused viewpoint.<sup>116</sup>

It is acknowledged that an important limitation of this proposition is that there is currently a lack of reliable economic literature on the subject.<sup>117</sup> As a consequence of the dominance of industrial economics in antitrust analysis in both Europe and North America, we lack the economic toolkit to distinguish between conduct that can be justified from the standpoint of innovation, but not from a short-term price perspective.<sup>118</sup> However, there exists a wealth of literature on dynamic capabilities from the field of strategic management that could serve as a useful starting point for the development of more robust economic models.<sup>119</sup> For instance, Kuuluvainen demonstrated how dynamic capabilities frameworks can be used to accurately model and predict the development of enterprises in the manufacturing sector.<sup>120</sup> This highlights the potential that such frameworks have in providing competition regulators with a useful toolkit for analysing individual companies' specific capabilities, and coming to reliable conclusions regarding their competitive potentials.

Moreover, the lack of economic literature on dynamic capabilities presents an exciting opportunity in competition law and economics to develop new frameworks for modelling dynamic competition. In any case, competition regulators are not completely alien to dynamic capabilities. The CMA has used dynamic competition theories of harm to analyse potential competition concerns arising in the *Sabre/Farelogix* and *Facebook/Giphy* mergers.<sup>121</sup> Given that competition authorities globally are currently proposing and refining policies to radically alter the regulation of the largest digital platform ecosystems, Big Tech companies offer us a brilliant opportunity to develop dynamic competition theory and make competition law and analysis fit for the digital age.

### III. COMPETITION REGULATION POST-BREXIT: AN EMBRACE OF EX ANTE

Competition authorities in Europe and beyond have begun to examine the negative impact of MAGMA companies on their economies, alongside wider issues surrounding digitalisation. Regulators are concerned about the trend of increased and durable market dominance by a small number of companies. The Furman

<sup>115</sup> *ibid.*

<sup>116</sup> *ibid.*

<sup>117</sup> *ibid* 1170.

<sup>118</sup> *ibid.*

<sup>119</sup> *ibid* 1168ff.

<sup>120</sup> Arto Kuuluvainen, 'How to Concretize Dynamic Capabilities? Theory and Examples' (2012) 5 *Journal of Strategic Management* 381, 386–389.

<sup>121</sup> CMA (n 42); CMA, 'Completed acquisition by Facebook, Inc (now Meta Platforms, Inc) of Giphy, Inc.: Final report on the case remitted to the CMA by the Competition Appeal Tribunal' (CMA November 2021) <[https://assets.publishing.service.gov.uk/media/635017428fa8f53463dcb9f2/Final\\_Report\\_Meta.GIPHY.pdf](https://assets.publishing.service.gov.uk/media/635017428fa8f53463dcb9f2/Final_Report_Meta.GIPHY.pdf)> accessed 23 March 2023.

Report,<sup>122</sup> for instance, highlighted concerns surrounding concentration in the digital sector. Case in point being the online search market, where Google has enjoyed durable dominance. The Commission found that Google has consistently held a high market share in the EU online search market since 2008.<sup>123</sup> Competition authorities are concerned with the effects of this durable dominance and lack of effective competition on both end consumers and business users.

Regulators are also concerned with the imposition of unfair terms and restrictions on business users.<sup>124</sup> This also includes the use of business user data by large digital platforms to gain an unfair competitive advantage over said users in the markets in which both business users and the platform in question compete in.<sup>125</sup> As aforementioned, Amazon has been accused of using third-party seller data to compete with said companies.<sup>126</sup> Apple recently faced legal action over the 30% commission it charges all developers that sell products on its app store.<sup>127</sup> In *Google Shopping*,<sup>128</sup> the Commission fined Google €2.4 billion for using its dominant position in online search to showcase its shopping comparison service more favourably than its competitors.

*Google Shopping* epitomises the need for a revamp of competition regulation in both the UK and the EU. Though the Commission was able to use the EU's existing competition toolkit to penalise Google, the investigation took seven years to complete,<sup>129</sup> and had to wait a further four years before being able to enforce the decision, due to Google appealing the Commission's decision.<sup>130</sup> One of the most frustrating challenges for regulators in digital markets is the sheer length of time it takes to execute enforcement actions in such markets. To address this chasm, both the Commission and the UK Government are preparing to introduce new regimes that will attempt to regulate MAGMA companies ex ante. This is in hope that their initiatives will lead to quicker and more effective competition regulation, and a move away from the case-specific finding of anticompetitive conduct that has characterised much of UK and EU competition law.<sup>131</sup>

<sup>122</sup> Furman Report (n 76).

<sup>123</sup> *Google Search (Shopping)* (n 11) paras 273–282.

<sup>124</sup> *ibid* para 48.

<sup>125</sup> *ibid* para 47.

<sup>126</sup> Karla and Stecklow (n 12).

<sup>127</sup> Andrew Ross Sorkin and others 'Why Apple Didn't Lose in the Epic Games Ruling' *The New York Times* (13 September 2021) <[www.nytimes.com/2021/09/13/business/dealbook/apple-epic-fortnite-lawsuit.html](http://www.nytimes.com/2021/09/13/business/dealbook/apple-epic-fortnite-lawsuit.html)> accessed 2 March 2022; *Epic Games, Inc v Apple Inc*, 493 F Supp 3d 817 (ND Cal 2020).

<sup>128</sup> Javier Espinoza, 'EU wins €2.4bn Google Shopping case' *Financial Times* (10 November 2021) <<https://on.ft.com/3D2DWfD>> accessed 6 March 2022; *Google Search (Shopping)* (n 11).

<sup>129</sup> Espinoza (n 128).

<sup>130</sup> General Court of the European Union, 'Press Release No 197/21' (General Court of the European Union 10 November 2021) <<https://curia.europa.eu/jcms/upload/docs/application/pdf/2021-11/cp210197en.pdf>> accessed 6 March 2022.

<sup>131</sup> Pablo Ibáñez Colomo, 'The Draft Digital Markets Act: A Legal and Institutional Analysis' (2021) 12 *Journal of European Competition Law & Practice* 561, 565.

## A. AN OVERVIEW OF THE NEW EU AND PROPOSED UK EX ANTE REGIMES

The introduction of the Digital Markets Unit (DMU) and the DMA represent significant shakeups of the UK and EU competition law regimes, which, hitherto the UK's formal exit from the EU, were aligned. The UK, drawing on insights from the Furman and Penrose Reports,<sup>132</sup> as well as advice from the Digital Markets Taskforce,<sup>133</sup> has opted to establish a dedicated regulator for digital markets, the DMU. Its purpose is to promote competition and competitive outcomes for the benefit of consumers, through addressing both the sources of market power and economic harms stemming from the largest digital platforms' exercise of that market power.<sup>134</sup>

The EU on the other hand, with the entering into force of the DMA on 1 November 2022, has chosen against the establishment of a specialist digital markets regulator. Instead, the Commission will preside over the new regime. The DMA sets out a series of wide-ranging obligations on the largest digital platforms, with the purpose of ensuring 'fair economic outcomes' and 'contestability' in the EU digital markets, addressing the concerns highlighted earlier in this section.<sup>135</sup>

### (i) *Strategic Market Status, Gatekeepers, and Core Platform Services*

Both the UK and EU regimes will impose far-reaching obligations on the largest digital platforms. This is in pursuit of addressing, in the view of the competition authorities, aforementioned competitive harms, as well as promoting competition or competitive outcomes. However, they differ in how they define firms as being sufficiently large and having sufficiently substantial market power to be subject to their respective regimes.

The DMA adopts a more formulaic approach in defining large digital platforms. DMA duties will only apply to firms designated as 'gatekeepers'.<sup>136</sup> These are enterprises whose activities have a significant impact on the internal market,<sup>137</sup>

<sup>132</sup> John Penrose, 'Power to the People: Independent Report on Competition Policy (United Kingdom Government 2021) <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/961665/penrose-report-final.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/961665/penrose-report-final.pdf)> accessed 23 March 2023.

<sup>133</sup> CMA, 'A New Pro-Competition Regime for Digital Markets: Advice of the Digital Markets Taskforce (CMA 2020) <[https://assets.publishing.service.gov.uk/media/5f5ce7567e90e07562f98286c/Digital\\_Taskforce\\_Advice.pdf](https://assets.publishing.service.gov.uk/media/5f5ce7567e90e07562f98286c/Digital_Taskforce_Advice.pdf)> accessed 23 March 2023.

<sup>134</sup> United Kingdom Department for Digital, Culture, Media & Sport (DCMS) and Department for Business, Energy & Industrial Strategy (BEIS) 'A New Pro-Competition Regime for Digital Markets' (United Kingdom Government 2021) 14 <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1003913/Digital\\_Competition\\_Consultation\\_v2.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003913/Digital_Competition_Consultation_v2.pdf)> accessed 23 March 2023.

<sup>135</sup> DMA Recital 5; DMA Recital 7.

<sup>136</sup> DMA, arts 1(2), 5.

<sup>137</sup> *ibid* arts 2(1), 3(1)(a).

operate a core platform service (CPS) that serves as an important gateway for business users to reach end consumers,<sup>138</sup> as well as enjoying an entrenched and durable position in its operations.<sup>139</sup> Obligations for gatekeepers apply only to parts of the undertaking that provide the said CPS.<sup>140</sup> Article 2(2) DMA provides a definite set of activities considered to be CPS, ranging from online social networking sites to cloud computing services.<sup>141</sup>

Under the DMA, undertakings providing CPSs will be deemed as gatekeepers primarily through a set of three criteria stipulated in article 3(1), whereby specific thresholds must be met before an undertaking is assigned gatekeeper status. For example, gatekeepers must have a significant impact on the single market, measured by an annual European Economic Area turnover of equal to or over €7.5 billion in the last three financial years.<sup>142</sup> If an undertaking does not meet the thresholds in article 3(2), but does meet the criteria set in article 3(1), they can nonetheless be held to be gatekeepers providing CPSs after a market investigation by the Commission.<sup>143</sup> However, if a firm is held to be gatekeeper through this method, DMA obligations will apply on to some of the undertaking's activities.<sup>144</sup>

The DMA is significant because it departs from contemporary competition law in two key aspects. Firstly, it embraces a set of objectives other than the protection of 'undistorted competition'.<sup>145</sup> The Commission, in exercising its newfound DMA powers, will not be exclusively focused on nor constrained by the need to protect undistorted competition.<sup>146</sup> Secondly, it eliminates the need to demonstrate the anticompetitive effect of a practice on a case-by-case basis.<sup>147</sup> This should, in theory at least, allow for speedier and faster decision-making and adjudication by the Commission regarding CPSs performed by gatekeepers, addressing some key criticisms of competition law in addressing economic harms caused by large digital platforms.

In contrast, the DMU's proposed designation system for large platform companies is simpler, but therefore, more uncertain. The UK regime under the DMU will only apply to firms who have 'strategic market status' (SMS) vis-à-vis a particular activity they carry out.<sup>148</sup> When deciding whether a firm is to be a SMS-designated firm, the proposed test focuses on whether a firm has substantial and entrenched market power in at least one digital activity,<sup>149</sup> which provides them with a 'strategic position'.<sup>150</sup> Rather than draft more specific rules around SMS

<sup>138</sup> *ibid* art 3(1)(b).

<sup>139</sup> *ibid* art 3(1)(c).

<sup>140</sup> *ibid* art 1(2).

<sup>141</sup> *ibid* arts 2(2)(c), 2(2)(i).

<sup>142</sup> *ibid* art 3(2)(a).

<sup>143</sup> *ibid* arts 3(8), 17(1).

<sup>144</sup> *ibid*.

<sup>145</sup> *ibid* Recital 11.

<sup>146</sup> Ibáñez Colomo (n 131) 3.

<sup>147</sup> *ibid*.

<sup>148</sup> DCMS and BEIS (n 134), 28; CMA (n 133).

<sup>149</sup> CMA (n 133) 21–22.

<sup>150</sup> *ibid* 8.

designation, the UK's approach with the DMU has been to empower it with wide discretion when designating firms with strategic market status. This is in recognition of the reality that no two large digital platforms are the same. As the world continues to digitalise and more digital companies enter the fore of competition law, provisions such as the SMS designation criteria exhibit the necessary flexibility for the DMU to make assessments as to whether a firm should be given SMS designation.

*(ii) Obligations on Digital Platforms*

Once digital platforms have been designated with SMS, or are deemed to be gatekeepers providing a CPS, they will be subject to various obligations. As we wait to receive more clarity regarding specific rules which MAGMA companies will likely be subject to under UK competition law, this sub-section will focus primarily on the DMA.

Articles 5 to 7 of the DMA are where the bulk of the duties MAGMA companies will likely be subject to. The obligations stipulated in the aforesaid articles will apply as a matter of principle to all parts of a CPS identified in article 3(9). However, it must be noted that, when the CPS provider is found not have 'an entrenched and durable position in its operations',<sup>151</sup> and it is not foreseeable that the situation will change 'in the near future',<sup>152</sup> such obligations will be adjusted.<sup>153</sup> article 5 deals with duties that do not require further specification or implementation, as they are viewed as being 'self-executing'.<sup>154</sup> The provisions in article 5 are mandatory and unqualified; they apply to all gatekeeper conduct, irrespective of any efficiencies that can be evidenced in their defence.<sup>155</sup> For instance, most-favoured nation clauses (MFNs), which ensure that business users sell their products on digital platforms at better or equal terms than other platforms,<sup>156</sup> will likely be banned for companies deemed to provide CPSs. This is despite the fact that MFNs are widely used and are by many in the digital sector as being standard practice.<sup>157</sup>

Article 6 stipulates wide-ranging obligations that would need further specification. The Commission would, at least theoretically, have the ability to engage in a fundamental restructuring of a gatekeeping digital platform that falls within

<sup>151</sup> DMA art 3(1)(c).

<sup>152</sup> *ibid.*

<sup>153</sup> *ibid* art 17(4).

<sup>154</sup> DMA, Recital 15; Rupprecht Podszun, Phillip Bongartz, and Sarah Langenstein, 'The Digital Markets Act: Moving from Competition Law to Regulation for Large Gatekeepers' (2021) 2 *Journal of European Consumer and Market Law* 60, 64.

<sup>155</sup> Ibáñez Colomo (n 131) 564.

<sup>156</sup> Ibáñez Colomo (n 131) 564; Gönenç Gürkaynak and others, 'Most-Favored-Nation Clauses in Commercial Contracts: Legal and Economic Analysis and Proposal for a Guideline' (2016) 42 *European Journal of Law and Economics* 129, 130.

<sup>157</sup> Avantika Chowdhury, 'Most Favoured Nation Clauses: In Need of an Effects-Based Approach' (2021) 1 *Concurrences* 20.

the ambit of the provision.<sup>158</sup> The Commission could impose obligations on undertakings to enable other players to establish their own application stores.<sup>159</sup> This would drastically alter the nature of competition in, for instance, the mobile application store market, where Apple and Google hold a duopoly in most markets worldwide.<sup>160</sup> The ability for the Commission to target and alter the ‘core monetisation strategies’ of the largest technology platforms demonstrates the potency of the regime.<sup>161</sup>

Turning to UK competition law, the DMU will be equipped with the power to administer pro-competitive interventions (‘PCIs’).<sup>162</sup> These will serve as a speedier alternative to market investigations, whereby the DMU will focus on investigating a competition concern regarding a designated activity through a firm-specific lens.<sup>163</sup> This, in theory will reduce the time for remedies to be proposed and implemented. Remedies could be, for example, structural in nature (that is, the splitting up on-site and off-site data) or behavioural, such as prohibiting behaviour like self-preferencing.<sup>164</sup> This will allow the DMU to respond to fast-changing markets in a speedier manner than market investigations. The legal test before PCIs can be implemented will be whether there an adverse effect on competition. This is in line with the current legal test for market investigations.<sup>165</sup>

While the DMA focuses on developing general rules applicable to all Big Tech Companies, the DMU will develop firm-specific rules for each SMS-designated firm to adhere to.<sup>166</sup> All SMS-designated firms will be subject to legally binding, high-level principles or codes of conduct, specifying the behaviour expected of them.<sup>167</sup> These will then be supplemented with firm-specific codes for SMS-designated firms to abide by.<sup>168</sup> Therefore, for example, the obligations placed on Amazon, the large e-commerce platform, will differ from those imposed on Apple or Google.

Finally, both the DMU and the Commission through the DMA have incorporated forms of dialogue in their approach to regulating digital platforms. Article 8(3) DMA leaves open the possibility of regulatory dialogue for some obligations. Gatekeepers would be able to discuss measures taken by the Commission, ensuring that there is effective and cooperative compliance by large digital platforms.<sup>169</sup>

<sup>158</sup> Ibáñez Colomo (n 131) 564.

<sup>159</sup> DMA, art 6(4).

<sup>160</sup> Greg Sterling, ‘US market becoming a smartphone duopoly: Apple, Samsung dominate, while others are left behind.’ (*MarTech*, 23 July 2018) <<https://martech.org/us-market-becoming-a-smartphone-duopoly/>> accessed 7 March 2022.

<sup>161</sup> Ibáñez Colomo (n 131) 564.

<sup>162</sup> DCMS and BEIS, ‘Response to the CMA’s Market Study into Online Platforms and Digital Advertising’ (United Kingdom Government 2020); CMA (n 133) 34.

<sup>163</sup> CMA (n 133) 34.

<sup>164</sup> *ibid* 43.

<sup>165</sup> Enterprise Act 2002, s 134.

<sup>166</sup> CMA (n 133) 35; DCMS and BEIS (n 134) 27.

<sup>167</sup> *ibid*.

<sup>168</sup> *ibid*.

<sup>169</sup> Commission, ‘Impact Assessment Report’ SWD (2020) 363 final, paras 200, 210.

Similarly, the Digital Markets Taskforce recommended that the DMU adopt a ‘participative approach’ to the regulation of SMS-designated firms.<sup>170</sup> The DMU will consult not only SMS-designated firms, but all relevant stakeholders, especially in matters concerning a small number of stakeholders.

## B. THE DMA AND DMU: DIFFERENT REGIMES, SIMILAR PROBLEMS

It is important to contextualise the DMA and DMU. Both initiatives are being formulated and refined under a climate of intense unease and apprehension over the level of concentration in digital markets, and its impact on business users, consumers, and the competitive landscape overall. UK and EU competition law, with their traditional emphasis on encouraging competition for the benefit of consumers, offers regulators an effective tool, when used correctly, to reinvigorate digital markets with much needed competition. Or so it is argued. However, both regimes, though ambitious in their attempts to rewrite the rules regarding competition regulation, have excessively broad mandates. The DMU and the Commission via DMA will deal with issues ranging from the protection of privacy in some form, along with encouraging innovation and helping shape fairer competitive outcomes.

Bowman and others, for instance, in analysing the DMU, note that it suffers from a lack of clearly defined goals and objectives, limits to its powers and effective oversight.<sup>171</sup> For example, though the DMU was established to promote competition in digital markets for the benefit of consumers, its mandate now spans from data protection to the prevention of market power leveraging and self-preferencing. As Ibáñez Colomo notes, several DMA provisions are in essence ‘codification[s] of competition law investigations’.<sup>172</sup> The DMA contains provisions specifically tackling self-preferencing, perceived abuses of business user data and the monopolisation of application stores, all referencing ongoing or past investigations such as *Google Shopping* or the Commission’s recent investigation into Amazon over its alleged exploitation of business user data.<sup>173</sup>

With both regulators being given vast powers and discretion to regulate digital platforms, the insights offered in section III of this piece are of the essence. If antitrust regulators are given impossibly broad mandates, plagued by a lack of an overarching ‘regulatory idea’,<sup>174</sup> their success is bound to be limited, if not corrupted by the inclusion of a range of factors beyond consumer welfare. As

<sup>170</sup> CMA (n 142), 48.

<sup>171</sup> Sam Bowman, Sam Dumitriu, and Aria Babu, ‘Conflicting Missions: The Risks of the Digital Markets Unit to Competition and Innovation’ (The Entrepreneurs Network and the International Center for Law & Economics 2021) 11 <<https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/626c18397b27ec05bccb8e17/1651251266381/Conflicting+Missions.pdf>> accessed 23 March 2023.

<sup>172</sup> Ibáñez Colomo (n 131) 565.

<sup>173</sup> *ibid.*

<sup>174</sup> Podszun, Bongartz, and Langenstein (n 164) 61.

explained in section IV, dynamic capabilities frameworks provide us with an opportunity to better situate and understand the competitive dynamics of digital markets and regulate accordingly. Drawing upon insights garnered from literature on dynamic capabilities, the next sub-sections shall demonstrate how a more expansionist approach to competition regulation inhibits promotion of the most *effective* forms of competition/competitive pressure in digital markets, and how that can be remedied.

### C. THE DMA AND DMU: PROMOTING INEFFECTIVE COMPETITION?

#### (i) *Promotion of Inter-platform Competition*

One increasingly important aspect of competition in digital markets which, hitherto, has been inadequately examined, is the role inter-platform competition has in helping create a more competitive landscape in the digital sector. In 2021, *The Economist* published an article highlighting an interesting phenomenon in digital markets; the largest digital platforms entering other platforms' 'home' markets.<sup>175</sup> Apple, though primarily generating revenue from the sale of its hardware and software, as well as commissions stemming from its App Store purchases, has begun to venture into music and video streaming, and podcasts, competing with other large platforms like Spotify, Netflix, and Amazon.<sup>176</sup> Such competitive pressures have aided the slowdown in the level of concentration in many markets where MAGMA compete in. In the 11 largest tech markets analysed by *The Economist*, MAGMA saw the increase of their market share slow down significantly in inter-app store, business software and online advertising markets.<sup>177</sup>

In many ways this is not all too surprising. It is the *coalescence* of network effects, extreme returns of scale and data-related competitive advantages that helped give rise to large technology companies like MAGMA, as well as aid the durability and longevity of their market power. Building on from the Apple example, suppose Apple attempted to venture, organically, into the e-commerce market, attempting to build a platform to rival Amazon. The Commission could, for instance, in exercising its newfound powers, or the DMU through a PCI, prohibit such conduct, citing concerns over Apple's leveraging of its dominance in one market to gain power in another market.<sup>178</sup> Such a policy would be detrimental as it would reduce an effective form of competitive pressure. Furthermore, it would force MAGMA to focus on defending their home markets, making it even harder for smaller firms to compete.

<sup>175</sup> The Economist, 'The new rules of competition in the technology industry' *The Economist* (27 February 2021) <[www.economist.com/leaders/2021/02/27/the-rules-of-the-tech-game-are-changing](http://www.economist.com/leaders/2021/02/27/the-rules-of-the-tech-game-are-changing)> accessed 4 March 2022.

<sup>176</sup> *ibid.*

<sup>177</sup> *ibid.*

<sup>178</sup> Petit and Hanspach (n 63).



Any firm looking to meaningfully compete with a company the size of Amazon would need large pools of capital, strong, pre-existing network effects, and large datasets to create an offering compelling enough to entice users away from the platform. However, if UK or EU regulators chose to block such a move, this would prevent effective competition likely to exert meaningful competitive pressure on Amazon.<sup>179</sup> In any case, both regimes fail to provide a framework for balancing conflicting interests, such as policy goals to increase the competitive potential of business users and the need to promote effective competition. This adds further uncertainty to already opaque regimes.<sup>180</sup> They offer limited to no grounds of appeal for regulatory decisions. For new regimes equipping regulators with far-reaching powers to impact the evolution of digital competition, the issue of inter-platform competition showcases the deficiencies plaguing regimes that lack clear, overarching regulatory ideas or goals, as well as regulations that operate on the basis that all forms of adjacent entry by incumbent firms are undesirable unless proven otherwise.

*(ii) Data Protection and Data-Powered Contestability*

Both the Commission and CMA take the view that data represents a significant competitive advantage in digital markets. The DMU will, through PCIs, impose data portability requirements on SMS firms. The DMA gives us an idea of how such PCIs will look like.<sup>181</sup> Article 6 DMA imposes various data portability requirements on gatekeepers in relation to their CPS. Gatekeepers are to enable ‘effective portability’ business and end user generated data.<sup>182</sup> This includes providing ‘continuous and real-time access’ to the data,<sup>183</sup> in an attempt to promote competitive pressure from non-MAGMA firms. Additionally, where compliant with European General Data Protection Regulation (GDPR) requirements,<sup>184</sup> gatekeepers must provide business users or any third parties authorised by them, without cost, ‘effective, high-quality and real-time access and use of aggregated and non-aggregated data’.<sup>185</sup> This is so long as the data is generated vis-à-vis the gatekeeper’s CPS.<sup>186</sup>

<sup>179</sup> Bowman, Dumitriu, and Babu (n 171).

<sup>180</sup> *ibid.*

<sup>181</sup> Ibáñez Colomo (n 131).

<sup>182</sup> DMA, art 6(9).

<sup>183</sup> *ibid.*

<sup>184</sup> Regulation 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) [2016] OJ L119/1; Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation) (Text with EEA relevance).

<sup>185</sup> *ibid* art 6(10).

<sup>186</sup> *ibid*

The article 6 requirements are onerous, but it is unclear whether they will meaningfully assist increasing the competitive potential of business users.<sup>187</sup> Though the provisions do, somewhat, address a key issue—accentuated data-related competitive advantages enjoyed by incumbent digital platforms—the DMA, nor arguably competition law, can help with addressing the strong network effects that MAGMA firms possess. Nicholas and Weinberg’s study highlights why this is the case.<sup>188</sup> They interviewed potential competitors to Facebook, and assessed the impact of Facebook’s data portability initiative, whereby it agreed to share end user data to rivals, so long as the individuals consented to the transfer. The start-up firms in question found that a lot of the data was not useful without context.<sup>189</sup> For example, Facebook competitors had comment data transferred from Facebook onto their platform. However, it was of little use without context.<sup>190</sup> It was not readily decipherable whether a comment in question was in relation to cats or dogs, for instance, and whether the specific user’s comment data was representative of other users.

Limited access to useful data by competitor firms was not necessarily because of Facebook refusing to increase portability.<sup>191</sup> Rather, it stemmed from competitors lacking a sufficiently large userbase to draw meaningful insights from the data they did have.<sup>192</sup> A structural feature of digital markets—network effects and the competitive advantages stemming from large userbases—inhibited competitor firms’ ability to develop products to meaningfully compete with Facebook.<sup>193</sup> Consequently, the likes of Facebook, equipped with vast amounts of data, will be able to further develop its product quality, which will help increase the durability of the dominance it already enjoys in digital markets.<sup>194</sup> Given the above analysis, it is doubtful that data portability will have the effect that both the Commission and the CMA envision it to have.

*(iii) Getting Rivalrous Competition Right: Promoting Complements-Based Competition*

The preceding sub-subsections evidence how structural features of digital markets inhibit competitors lacking the market dominance of MAGMA firms from offering effective competitive pressure on the digital giants. Though the aforesaid

<sup>187</sup> Petit and Teece (n 93); Petit and Hanspach (n 62).

<sup>188</sup> Gabriel Nicholas and Michael Weinberg, ‘Data Portability and Platform Competition: Is User Data Exported From Facebook Actually Useful to Competitors’ (Engelberg Center on Innovation Law and Policy 2019) <[www.law.nyu.edu/centers/engelberg/pubs/2019-11-06-Data-Portability-And-Platform-Competition](http://www.law.nyu.edu/centers/engelberg/pubs/2019-11-06-Data-Portability-And-Platform-Competition)> accessed 18 February 2022.

<sup>189</sup> *ibid* 14.

<sup>190</sup> *ibid*.

<sup>191</sup> *ibid* 16.

<sup>192</sup> *ibid*.

<sup>193</sup> Crémer Report (n 72); Furman Report (n 72).

<sup>194</sup> Petit and Teece (n 93); Petit and Hanspach (n 63); Khan (n 7); Newman (n 71).

structural features create strong barriers to entry, they can be overcome. By analysing digital competition using dynamic capabilities frameworks, the most effective forms of competitive pressures can be promoted through competition law.

One such form of competitive pressure identified in management literature is complements-based competition.<sup>195</sup> The DMA, for example, primarily seeks to promote a form of rivalrous competition whereby competitor firms attempt to gain market share in the core markets of MAGMA firms. The promotion of such forms of competitive rivalry in competition law and policy are unlikely to result in effective and durable competitive pressure on the most dominant platform ecosystems.<sup>196</sup> However, insights from management literature suggest that competitive pressure from complements is more effective and durable.<sup>197</sup>

Complementary goods are products which are often bought and used together.<sup>198</sup> For instance, gaming consoles are frequently purchased alongside video games and gaming controllers. This is in contrast to substitute goods, whereby increased demand for a substitute means less demand for the primary product. Insights from management literature suggest that complements, in the face of seemingly impenetrable incumbents, over time, can shift value or rents from the incumbent toward its own business. Complements-based competition is effective because complementor firms gain market power over longer time horizons than conventional, substitutes-based competition, and are less likely to be seen as threats by incumbents.<sup>199</sup> Complementors often add value to an ecosystem, for example, by enhancing end user experiences.<sup>200</sup> If a complementor's technological capabilities and organisational learnings are strong, it can exploit opportunities that arise as a platform ecosystem develops and matures.<sup>201</sup> Over time it can imbed itself into the incumbent's ecosystem, becoming hard to remove and occasionally, begin to shift value from the incumbent ecosystem onto itself.<sup>202</sup> Incumbents find it more difficult to dislodge complementors because, by the time they pose a serious enough competitive threat, they are often an integral part of the incumbent's ecosystem and are thus more likely to be tolerated.<sup>203</sup>

TikTok, the popular social media application, exemplifies of the potency of complements-based competition in the face of de facto untouchable incumbents.<sup>204</sup>

<sup>195</sup> Hal R Varian, *Intermediate Microeconomics: A Modern Approach* (9th edn, WW Norton & Company 2020) 40.

<sup>196</sup> Petit and Teece (n 93).

<sup>197</sup> Ron Adner and Marvin Lieberman, 'Disruption Through Complements' (2021) 6 *Strategy Science* 91.

<sup>198</sup> Varian (n 195).

<sup>199</sup> Adner and Lieberman (n 197), 94.

<sup>200</sup> *ibid.*

<sup>201</sup> Barbara Levitt and James G March, 'Organizational Learning' (1988) 14 *Annual Review of Sociology* 319; Constance E Helfat and others, *Dynamic Capabilities: Understanding Strategic Change in Organisations* (Blackwell Publishing 2007).

<sup>202</sup> Adner and Lieberman (n 197) 97–99.

<sup>203</sup> *ibid.*

<sup>204</sup> The Economist, 'TikTok's rapid growth shows the potency of video' *The Economist* (7 October 2021) <[www.economist.com/graphic-detail/2021/10/07/tiktoks-rapid-growth-shows-the-potency-of-video](http://www.economist.com/graphic-detail/2021/10/07/tiktoks-rapid-growth-shows-the-potency-of-video)>.

TikTok, in its earliest iteration began as a content creation application, often used by users of larger platforms like Instagram or Facebook to create short videos with music.<sup>205</sup> TikTok initially enhanced the experience of Facebook and Instagram users. Over time, arguably as a result of its impressive entrepreneurial capabilities, it was able to develop a product and algorithm capable of competing with larger incumbents such as Instagram.<sup>206</sup> Between 2018 and 2020, TikTok, in all senses of the word, went viral; its global userbase increased by over 1000%.<sup>207</sup> TikTok's global popularity is testament to the potential that complements-based competitive pressures have to revitalise digital competition.

This has several implications for competition law and policy. The shift to ex ante regulation by the EU and UK, if executed with a clear objective to promote complements-based competition, could serve as the catalyst of a much-needed wave of effective and durable competition in digital markets. To achieve this, there must be an embrace of dynamic capabilities frameworks, with regulators developing analytical tools to examine the entrepreneurial capabilities of both competitor firms and complementor companies operating within incumbents' ecosystems.

Provisions such as those relating to data portability and interoperability in the DMA would be most impactful if they were drafted and implemented with complementor firms in mind. Complementors, over time, can grow within an ecosystem, develop expertise and market knowledge, making them formidable challengers to incumbent platforms.<sup>208</sup> Furthermore, the DMU's approach of subjecting SMS firms to a code of conduct could best ensure that regulations are tailored to reflect the competition dynamics of each digital platform.<sup>209</sup> By focusing on drafting competition regimes that promote the most effective forms of competitive pressure on Big Tech companies, the DMU and Commission, over time, would develop invaluable institutional expertise on the complex competitive dynamics of MAGMA firms. As our economies continue to digitalise, such expertise would prove to become an invaluable asset for regulators in analysing the competition law issues of tomorrow.

<sup>205</sup> Catherine Shu, 'Tik Tok, WeChat and the growing divide between the US and China' (*TechCrunch*, 22 September 2020) <<https://techcrunch.com/2020/09/22/tiktok-wechat-and-the-growing-digital-divide-between-the-u-s-and-china/>> accessed 6 March 2022.

<sup>206</sup> Ben Smith, 'How TikTok Reads Your Mind' *The New York Times* (5 December 2021) <[www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html](http://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html)>; Christina Newberry, 'How the TikTok Algorithm Works in 2022 (and How to Work With It)' (*Hootsuite*, 11 February 2022) <<https://blog.hootsuite.com/tiktok-algorithm>> accessed 7 March 2022.

<sup>207</sup> Brian Dean, 'TikTok User Statistics (2022)' (*Backlinko*) <<https://backlinko.com/tiktok-users>> accessed 7 March 2022.

<sup>208</sup> Adner and Lieberman (n 197), 97-98.

<sup>209</sup> CMA (n 133), 35; DCMS and BEIS (n 134), 27.

#### IV. DYNAMIC COMPETITION POLICY: RECONCILING INNOVATION AND DATA PROTECTION

The preceding section not only highlights issues associated with the policy direction of the Commission through the DMA and the DMU, but also touches upon how regulation seeking to promote rivalrous, substitute-based competition can and will come into conflict with other important legislative initiatives, such as the GDPR. The promotion of substitutes-based competition and contestability, through greater access to user data for business users, seems to be diametrically opposed with more normative goals surrounding data protection. Data, when coupled with other structural features of digital markets, can be indispensable for firms needing to innovate and develop new products to remain competitive in the fast-moving digital sector. Data protection, on the other hand, is concerned with addressing power asymmetries between personal users and platforms,<sup>210</sup> as well as putting individuals in control of the data that they control.

Proposals to increase the competitive potential of business users, for example through data portability and interoperability requirements, present issues from a data protection and privacy perspective. Although the UK is planning a shakeup of its existing data protection regime,<sup>211</sup> the imposition of a regime that places restrictions on the flow and processing of data necessarily hinders innovation, especially in the digital sector.<sup>212</sup> After the introduction of the GDPR in the EU, innovation in AI and other digital technologies slowed,<sup>213</sup> with start-ups in Europe feeling the brunt of decreased investor confidence as evidenced in a decline of funding from venture capital firms.<sup>214</sup>

Despite concerns over the impact of regulation such as the GDPR on competition and innovation,<sup>215</sup> there is agreement that data protection is an important

<sup>210</sup> Francisco Costa-Cabral and Orla Lynskey, 'Family Ties: The Intersection Between Data Protection and Competition Law' (2017) 54 *Common Market Law Review* 11, 18–19.

<sup>211</sup> Department for Digital, Culture, Media & Sport 'Data: A New Direction' (Department for Digital, Culture, Media, and Sport 2021) <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1022315/Data\\_Reform\\_Consultation\\_Document\\_\\_Accessible\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1022315/Data_Reform_Consultation_Document__Accessible_.pdf)> accessed 22 April 2022.

<sup>212</sup> David Rand, 'The first unintended consequences of GDPR' (*Hewlett Packard Enterprise*, 26 February 2019) <[www.hpe.com/us/en/insights/articles/the-first-unintended-consequences-of-gdpr-1902.html](http://www.hpe.com/us/en/insights/articles/the-first-unintended-consequences-of-gdpr-1902.html)> accessed 12 April 2022; Jian Jia, Ginger Zhe Jin, and Liad Wagman, 'The Short-Run Effects of GDPR on Technology Venture Investment' (2018) NBER Working Paper 25248 <[www.nber.org/system/files/working\\_papers/w25248/w25248.pdf](http://www.nber.org/system/files/working_papers/w25248/w25248.pdf)> accessed 12 April 2022. See also George Leopold, 'GDPR Seen Slowing AI Innovation' (*Enterprise AI*, 9 April 2018) <[www.enterpriseai.news/2018/04/09/gdpr-seen-slowing-ai-innovation/](http://www.enterpriseai.news/2018/04/09/gdpr-seen-slowing-ai-innovation/)> accessed 12 April 2022.

<sup>213</sup> Leopold (n 212).

<sup>214</sup> Jia, Jin, and Wagman (n 212), 4.

<sup>215</sup> Damien Geradin, Theano Karanikioti, and Dimitrios Katsifis, 'GDPR Myopia: How a Well-Intended Regulation Ended up Favouring Large Online Platforms - the Case of Ad Tech' (2021) 17 *European Competition Journal* 47.

aspect of digital regulation.<sup>216</sup> Though it may seem that the promotion of competition and increased data protection are inherently at odds with each other, this need not be the case. Although data protection and competition law are distinct with differing goals, they do have for our purposes an important common objective: consumer welfare.<sup>217</sup> Both laws are concerned with individual welfare, albeit with competition law being concerned with individuals in their capacity as ‘aggregate consumers’.<sup>218</sup> This presents an opportunity for both areas of law to be applied in a ‘coherent and mutually enforcing manner’.<sup>219</sup> This is particularly important if we are to formulate a consumer welfare standard that accounts for the important role that data plays in the digital sector.

Though, in the past, the Commission and the European Court of Justice took the view that data protection was not a concern for competition law,<sup>220</sup> there has been a welcome paradigm shift on their part. Consumer welfare is not merely concerned with prices, but also choice, quality, and innovation.<sup>221</sup> As Costa-Cabral and Lynskey contend, the common goals of competition and data protection law presents the potential for data protection law to operate as a ‘normative yardstick’ for competition law in digital markets.<sup>222</sup> This would aid competition analysis by providing a framework for analysing non-price (quality) effects of potentially anti-competitive conduct, especially when data is involved.

Such frameworks will be crucial in the development of a consumer welfare standard that will guide regulators in analysing competition issues in the digital age. This is not only in regard to, for instance, evaluating the impact of anti-competitive conduct on data protection from a quality control perspective, but also in relation to constructing a competition regime that internalises the protection of individual data as a baseline for competition in digital markets. Although there is some truth in the argument that regulations like the GDPR disincentivise competition and innovation and favour incumbents, as they are the ones that have the capital and institutional expertise to cope and comply with such regulations, smaller firms, from a dynamic capabilities perspective, could also compete within this paradigm.

If such complements-based competition is promoted, firms who develop within an incumbent’s ecosystem will develop and mature in a manner compliant

<sup>216</sup> UNCTAD, ‘Data Protection and Privacy Legislation Worldwide’ (*UNCTAD*) <<https://unctad.org/page/data-protection-and-privacy-legislation-worldwide>> accessed 20 April 2022; Graham Greenleaf, ‘Global Data Privacy Laws 2019: 132 National Laws & Many Bills’ (2019) 157 *Privacy Laws & Business International Report* 14.

<sup>217</sup> Costa-Cabral and Lynskey (n 210) 21.

<sup>218</sup> *ibid.*

<sup>219</sup> *ibid* 31.

<sup>220</sup> *Google/DoubleClick* (Case COMP/M.4731) Commission Decision [2008] OJ C184/10; *Facebook/WhatsApp* (Case COMP/M.7217) Commission Decision [2014] OJ C417/4; Case C-238/05 *Asnef-Equifax v Ausbank* [2006] ECR I-11125, para 63.

<sup>221</sup> Case C-209/10, *Post Danmark I*, EU:C:2012:172, para 22.

<sup>222</sup> Costa-Cabral and Lynskey (n 210), 29.

with data protection. Not only would this approach promote and likely foster innovation that is compliant with data protection obligations, but such competitive pressures would also be more durable and long lasting. By the time complementors in a platform ecosystem would have become large enough to compete with an incumbent, the complementor would have grown within the incumbent's ecosystem, making the complementor likely to be comfortable with stringent, but necessary obligations such as the GDPR.

An embrace of the above approach to foster competition and innovation that is data protection compliant would lead to the development of a competition regime whereby innovation can only take place within the context whereby the data protection and privacy rights of users are respected.<sup>223</sup> A limitation of this approach is that a trade-off must be made between faster innovation and greater data protection regulations. If the goal of the UK or EU is to foster ethical innovation, one that respects users' access and control over their data, then the approach argued for in this section is favourable. The dynamic capabilities paradigm, and in particular the insights gained from complements- and platform-based competition, offers regulators with an alternative framework to develop competition law for the digital age.

## V. CONCLUSION

This article, through an analysis of the EU's Digital Markets Act and the UK's Digital Markets Unit, has endeavoured to demonstrate the potential of a modified consumer welfare standard in promoting effective competition in digital markets. While antitrust reforms cannot be entirely divorced from the wider social and political scepticism surrounding Big Tech, caution must be exercised when amending competition laws. Rather than acquiescing to dominant and popular political demands for a more purposive and expansionist competition law, it is imperative, for the promotion of effective and durable competitive pressure on Big Tech companies, that amendments to existing competition regimes are grounded in economic theory and informed by literature on dynamic capabilities.

What is clear is that digital markets are anything but static. They are chaotic canvases, cacophonous and discordant kaleidoscopes of companies, technologies and consumer preferences that seem to be in a perpetual state of flux. They leave us spectators, both experts and laypeople, in suspense as to what will happen next. Today's devilish disruptor may very well be tomorrow's Myspace. Nevertheless, amidst the chaos, this piece has sought to argue what we do know is that the digital sector is dynamic. The promise of monopoly-esque dominance, the ability and near necessity to leverage existing market power from the largest players requires a rethink of the economics of digital markets on our part. Part of this re-examination entails the development of a framework that properly accounts for this

<sup>223</sup> Luciano Floridi, 'Soft Ethics and the Governance of the Digital' (2018) 31 *Philosophy and Technology* 1.

dynamism. And it is in literature on dynamic capabilities, this article has contended, that a useful starting point can be found.

Though the notion of dynamic competition is not new, it has largely been ignored by mainstream competition economists and regulators. This, however, presents an exciting opportunity for academics, regulators and interested parties to open the ‘black box’ of the firm and develop theories and frameworks to aid competition authorities in analysing digital competition and regulate—both *ex ante* and *ex post*—accordingly. As Justice Thurgood Marshall so sagaciously remarked, antitrust laws are the ‘...Magna Carta of free enterprise’.<sup>224</sup> Though the current political circumstances in which antitrust finds itself are important, in designing a regime that does not pander to amorphous, ever-changing political and special interests, we can enable competition law to do what it does best: fostering free and fair markets, which operate first and foremost for the benefit of consumers, thereby creating a regime fit for the digital age.

<sup>224</sup> *United States v Topco Assocs, Inc* 405 US 596, 610 (1972).