A New Three-Body Problem?

The EU AI Act, Competition Law, and the Challenge of Modern Bigness

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List of Abbreviations

AD - Anno Domini

AI - Artificial Intelligence

AI HLEG - Artificial Intelligence High-Level Expert Group

CCDH - Center for Countering Digital Hate

CEN - European Committee for Standardisation

CENELEC - European Committee for Electrotechnical Standardisation

COD - Ordinary Legislative Procedure

DSA - Digital Services Act

DMA - Digital Markets Act

DOJ - Department of Justice

EC - European Commission

ECJ - European Court of Justice

ECLI - European Case-Law Identifier

ECR - European Court Reports

Ed - Editor

EEC - European Economic Community

E.g. - Exempli Gratia (Example Given)

ESO - European Standardisation Organisation

ETSI - European Telecommunications Standards Institute

EU - European Union

FRA - Fundamental Rights Agency

GDPR - General Data Protection Regulation

GPT - Generative Pre-trained Transformer

GPU - Graphics Processing Unit

HCAI - Human-Centric AI

HRW - Human Rights Watch

Ibid - Ibidem (In the Same Place)

I.e. - Id Est (That Is)

LDR - Legal Doctrinal Research

NCA - National Competition Authority

OECD - Organisation for Economic Co-operation and Development

OJ - Official Journal of the European Union

Para - Paragraph

Pub. L - Public Laws

R & D - Research and Development

SME - Small and Medium-Sized Enterprises

Subpara - Subparagraph

TEU - Treaty on European Union

TFEU - Treaty on the Functioning of the European Union

UN - United Nations

US - United States

U.S.C. - United States Code

WRP - Wettbewerb in Recht und Praxis (Competition in Law and Practice)

Chapter 1: Introduction

1.1 Background

The 21st century, if we can admit it, has made us all into pessimists.[1]

This is a sweeping generalisation.

For many, the individual pursuit of liberty and happiness remains generally safe.[2] Our societal progress is more questionable. We have been living for the past two decades in the age of Big: Big Banking, Big Pharma, Big Tech. This is a new time for great corporate power, with global industries controlled by a few dominant businesses. It is a 'curse of bigness' that has escaped the confines of the economic domain and spilled over into our lives. Big Tech is at the forefront of this Modern Bigness, perhaps even more so than other industries, because of its ubiquity. Its involvement spans health systems,[3] education,[4] public administration[5], humanitarian aid,[6] welfare services,[7] agriculture,[8] banking,[9] transport,[10] space exploration,[11] even going as far as to extend to democracy itself.[12] Big Tech makes it to the centre of public debates; it is in the headlines. It is the subject of European

[1] A play on the opening line of a well-known work. See Francis Fukuyama, *The End of History And The Last Man* (Macmillan 1992).

[2] I use the plural here mainly for stylistical effect. I do admit that this is a general statement and that as such it does not capture all of the different experiences of countries or individuals across the Globe.

[3] Jane Thomason, 'Big tech, big data and the new world of digital health' [2021] Global Health Journal 165.

[4] Hakan Ozalp, Pinar Ozcan, Dize Dinckol, Markos Zachariadis and Annabelle Gawer, '"Digital Colonization" of Highly Regulated Industries: An Analysis of Big Tech Platforms' Entry into Health Care and Education' [2023] California Management Review 78.

[5] Hongfei Gu, 'Data, Big Tech, and the New Concept of Sovereignty' [2023] Journal of Chinese Political Science 178.

[6] For example, the involvement of Tesla in the Ukraine-Russia War by making available the Starlink satellite internet service, in order to aid communication on the frontlines. Miller C, Scott M and Bender B, 'Ukrainex: How Elon Musk's Space Satellites Changed the War on the Ground' (*POLITICO*, 9 June 2022) <https://www.politico.eu/article/elon-musk-ukraine-starlink/> accessed 11 February 2024.

[7] Lina Dencik and Anne Kaun, 'Datafication and the Welfare State' [2020] Global Perspectives 12912.

[8] Felix Maschewski and Anna-Verena Nosthoff, 'Big Tech and the Smartification of Agriculture: A Critical Perspective' [2022] IT For Change 446.

[9] Miguel de la Mano and Jorge Padilla, 'Big Tech Banking' [2019] Journal of Competition Law & Economics 494.

[10] Sam Hind, Max Kanderske and Fernando van der Vlist, 'Making the Car "Platform Ready": How Big Tech Is Driving the Platformization of Automobility' [2022] Social Media + Society 2065.

[11] Currently there are four major Low Earth Orbit initiatives from the Eu and US: Starlink, Project Kuiper (Amazon), OneWeb, and Telesat. Steve Song PB, 'Big Tech Is Leading the New Space Race. Here's Why That's a Problem' (*Salon*, 16 November 2020) <https://www.salon.com/2020/11/14/big-tech-is-leading-the-new-space-race-heres-why-thats-a-problem/> accessed 11 February 2024.

[12] Francis Fukuyama, Barak Richman and Ashish Goel, 'How to Save Democracy from Technology: Ending Big Tech's Information Monopoly' [2021] Foreign Affairs 98.

parliamentary[13] and American congressional hearings[14] and investigations,[15] it is on the cover of magazines, and few political debates truly escape it.[16] But its presence is arguably not accompanied with the optimism of the Industrial Revolution but rather the wariness of the Gilded Age. It is not the hope that newer, more efficient technology coming from such firms will solve the world's ailments, but rather the fear that it will increase them – better platforms with better content come at the detriment of our attention span[17] and privacy,[18] unrestricted free speech online grows the risk of disinformation[19] and harassment,[20] while seemingly self-thinking machines leave an ever-growing footprint on the environment.[21]

This pessimism has, for the European Union, been 'productive' pessimism, at least in terms of creating new regulations. The last few years have seen the development and adoption of the General Data Protection Regulation (GDPR),[22] the Digital Services Act (DSA),[23] the Digital Markets Act

[13] See for example: Thibault Larger, 'EU Parliament Moves Ahead with Big Tech Hearing Plan' (*POLITICO*, 20 January 2021) <https://www.politico.eu/article/eu-parliament-gives-green-light-for-big-tech-hearing-google-facebook-amazon/> accessed 11 February 2024.

[14] Recent examples include: Ryan Tarinelli, 'Tech Leaders to Face Senate Panel on Sexual Exploitation Dangers' (Roll Call, 30 January 2024) <https://rollcall.com/2024/01/30/tech-leaders-to-face-senate-panel-on-sexual-exploitation-dangers/> accessed 11 February 2024; 'Senate Judiciary Committee to Press Big Tech CEOS on Failures to Protect Kids Online during Landmark Hearing Today: United States Senate Committee on the Judiciary' (United States Senate Committee on the Judiciary, 31 January 2024) <https://www.judiciary.senate.gov/press/releases/preview-senate-judiciary-committee-to-press-big-tech-ceos-on-failures-to-protect-kids-online-during-landmark-hearing-today> accessed 11 February 2024.

[15] European Parliament, 'Public Hearing on Whistle-Blower's Testimony on the Negative Impact of Big Tech Companies' Products on User: Questions and Answers' (Multimedia Centre) <https://multimedia.europarl.europa.eu/fr/video/public-hearing-on-whistle-blowers-testimony-on-the-negative-impact-of-big-tech-companies-products-on-user-questions-and-answers-_I213405> accessed 11 February 2024.

[16] See for instance Laura Kayali, 'Big Tech Back on the Hook in French Copyright Spat' (*POLITICO*, 17 January 2022) <https://www.politico.eu/article/big-tech-france-copyright-google-facebook/> accessed 11 February 2024

[17] Neika Sharifan and Laura Zahodne, 'Social Media Bytes: Daily Associations Between Social Media Use and Everyday Memory Failures Across the Adult Life Span' [2020] The Journals of Gerontology: Series B 540.

[18] Nadine Barett-Maitland and Jenice Lynch, 'Social Media, Ethics, and the Privacy Paradox' in Christos Kalloniatis, Carlos Travieso-Gonzalez (eds), *Security and Privacy From a Legal, Ethical, and Technical Perspective* (Intechopen 2020).

[19] Spencer McKay and Chris Tenove, 'Disinformation as a Threat to Deliberative Democracy' [2020] Political Research Quarterly 511.

[20] A prevalent example is harassment of journalists. Avery Holton, Valerie Belair-Gagnon, Diana Bossio and Logan Molyneux,"'Not Their Fault, but Their Problem": Organizational Responses to the Online Harassment of Journalists' [2023] Journalism Practice 859.

[21] Generative AI appears to bring the worst of both worlds together: a large carbon footprint while consuming a substantial amount of water and electricity. See Guglielmo Tamburrini, 'The AI Carbon Footprint and Responsibilities of AI Scientists' [2022] Philosophies 7.

[22] European Commission, Regulation 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, and repealing Directive 95/46/EC (General Data Protection Regulation/GDPR) [2016] OJ L 119/1.

[23] European Commission, Regulation 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) [2022] OJ L 277.

(DMA),[24] the Data Governance Act,[25] the Data Act,[26] the proposed European Health Data Space[27] and, most recently, the EU AI Act.[28] These efforts can be seen as part of the larger EU approach towards the digital transition, as outlined in the 2015 EU Digital Single Market strategy.[29]

Much can be debated about the efficiency of these new legal instruments. If we set the pessimism aside for a moment and take the view that these regulations are a desirable and generally effective response to Modern Bigness, that means that the EU is on an upward trajectory. Its efforts to stave off potential threats before they take place make the EU a key global player. The Union sets the tone for how new regulations dealing with Big Tech should look and others follow in its steps.[30]

If we take the opposite view, these efforts are too vague and coming a little too late. The technologies have already been developed, the harm has been done, and the time for genuinely efficient measures has run out, which leaves European legislators in a losing race of catching up.[31]

In this evolving and uncertain landscape, the EU AI Act represents an interesting, potentially 'game-changing' instrument. What makes the Act 'unique' is that it goes further than its predecessors by introducing a so-called human-centric approach to AI regulation. If successful, this approach could lead to a safer and more ethically aligned deployment of AI technologies, ensuring that human rights and societal values are at the forefront of technological advancement.[32] This is due to the fact that it prioritises human wellbeing and safety above purely financial gain. This approach, if enforced, could

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[24] European Commission, Regulation 2022/1925 of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives 2019/1937 and (EU) 2020/1828 (Digital Markets Act) [2022] PE/17/2022/REV/1.

[25] European Commission, Regulation 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation 2018/1724 (Data Governance Act) [2022] OJ L 152, 3.06.2022.

[26] European Commission, Regulation 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (Data Act).

[27] Proposal for a Regulation of the European Parliament and of the Council on the European Health Data Space COM/2022/197 final.

[28] European Parliament legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts [2024] (COM (2021)0206 – C9-0146/2021 – 2021/0106(COD)) 13.03.2024. See also: Corrigendum to the position of the European Parliament adopted at first reading on 13 March 2024 with a view to the adoption of Regulation (EU) 2024/ ..... of the European Parliament and of the Council laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act) P9_TA(2024)0138 (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)). The Corrigendum is the latest version of the Act (as of 19.04.2024). Hereinafter, I will use **'The EU AI Act'** to refer to this most recent version.

[29] European Commission, Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions A Digital Single Market Strategy For Europe (2015).

[30] See Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (Oxford University Press 2020).

[31] While the EU is arguably at the forefront of regulating (Big) Tech, some might still argue that such efforts should have started earlier and that at this point in time it could be too late to 'course correct.' This has to do with the so-called pacing problem of law when it comes to regulating technology (namely that the law always falls a bit behind when responding to new technological inventions). See for example: Gary E Marchant, 'Addressing the Pacing Problem' in Gary E Marchant, Braden R Allenby, Joseph R Herkert (eds), *The Growing Gap Between Emerging Technologies and Legal-Ethical Oversigh*t (Springer 2011).

[32] See section 1.6 of this Chapter and Chapter III for more.

help better tackle some of the overarching effects of Big Tech's growing influence. In other words, a human-centric approach might be a means of targeting corporate 'Bigness.'

1.2 The Topic and its Relevance in Competition Law

Boiled down to the simplest terms, competition law is concerned with counteracting the negative impacts of Bigness. 'Bigness' can be understood as market power and its effects on the market or consumer welfare. The European Court of Justice has previously defined power in competition law as 'a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained.'[33] However, Bigness, in the form of a dominant market position, does not automatically entail predatory behaviour. As such, it is not immediately sanctionable.[34] However, dominance can pave the way for abusive behaviour.[35] Companies that reach a certain amount of power and influence can be dangerous for business competition and can hinder innovation.[36] As previously mentioned, however, this influence is not only relegated to a relevant market sector of a company. What we are encountering in the case of Big Techs is a new form of Bigness which appears to be more far-reaching, and some could say, more worrisome for society.[37] It is not power that is relegated to the business world alone but instead power that breaches into the world's socio-political fabric. Fundamental rights such as that to privacy, information and free elections can be partially compromised by the rise of this Modern Bigness. As such it concerns not only companies or entrepreneurs, but individual citizens as well.

It can be argued that some of the negative effects of Modern Bigness will be accentuated by Artificial Intelligence (AI). AI can facilitate anti-competitive behaviour. It can be used to automatically set prices, and if companies use similar algorithms or data sources, it can lead to unintended price collusion. AI systems can monitor and adjust prices in real time, creating a de facto cartel without explicit human agreement (price fixing). AI can lead to price discrimination as it can tailor prices based on geographic data, causing consumers in different locations to be charged different prices for the same product, often in a way that limits competition in higher-priced regions.[38] AI can also enhance the network effects of a platform by using data and user behaviours to lock users into a single ecosystem, making it difficult for competitors to attract users away from the dominant

[33] United Brands v Commission (Case C-27/76) [1978] ECR 207, para 65; Hoffmann-La Roche v Commission (Case C-85/76) [1979] ECR 461, paras 38, 41. In the AKZO v Commission (Case C-62/86) [1991] ECR I-3359, para 60 the Court also detailed that a market share of 50 % is presumed dominant.

[34] See Tetra Pak v Commission (Case C-334/94) [1996] ECR I-5951, para 24 which is further emphasised in Compagnie Maritime Belge Transports SA (C-395/96 P), Compagnie Maritime Belge SA (C-395/96 P) and Dafra-Lines A/S (C-396/96 P) v Commission of the European Communities [2000] ECR I-1365. [2000] ECR I-1365, para 114.

[35] See Chapter II of this work for more.

[36] Annabelle Gawer Baum, 'Digital platforms and ecosystems: remarks on the dominant organizational forms of the digital age' [2021] Innovation: Organization and Management 110.

[37] For example, a recent poll has shown that 7 out of 10 people are worried about the impact that Big Techs can have on their privacy: 'New Poll Reveals Clear Majority Worry about How Tech Companies Use Their Personal Data' (*Amnesty International*, 8 August 2022) <https://www.amnesty.org/en/latest/press-release/2019/12/big-tech-privacy-poll-shows-people-worried/> accessed 3 June 2024 .

[38] OECD [2021], *OECD Business and Finance Outlook 2021: AI in Business and Finance.*

platform.[39] By strengthening the dominant position of firms, this AI-powered, anti-competitive behaviour allows for the facilitation of 'Modern Bigness.' For example, AI can enhance companies' surveillance capabilities. This can be used to stifle competition as well as threaten the right to privacy. By collecting and analysing vast amounts of data on consumer behaviour, Big Techs are able to maintain a strong position within the market and effectively counter possible threats from competitors. At the same time, this ensures that a few large companies preside over possibly sensitive data of millions. AI surveillance systems can collect and store personal information, which can be vulnerable to hacking and unauthorised access. If the data falls into the wrong hands, it can lead to a violation of privacy as well as other ramifications such as identity theft, blackmail, or targeted harassment.[40] From the perspective of democracy, we can also envision how access to personal information can be used to manipulate electoral outcomes through, for instance, highly targeted advertising or disinformation.[41] This can exacerbate the effects of 'Modern Bigness': AI strengthens the market dominance of already powerful companies and allows for potential breaches of human rights and democratic principles.

What, then, if any, should be the response of competition law to this Modern form of Bigness?

Competition law guards against abuses of market power and the rise of cartels, thus ensuring effective competition. At the same time, over the last few years, demands have been growing regarding what the aims of competition law should be. In particular, there is the sentiment that competition law should be more 'people-centred.'[42] It should protect more than just businesses, but also the environment,[43] fundamental rights,[44] and democracy as a whole.[45]

As such, some expect competition law to respond to Modern Bigness by changing its normative foundations. There is a desire for new remedies, concepts, and procedures that could better protect against what appears to be insufficiently regulated corporate activity.[46] However, it is difficult to foresee when or if an 'official' renewal of competition law's underpinnings would take place. What is easier to analyse at this moment in time is to what degree new legislations, such as the AI Act can

[39] Ibid.

[40] Hao-Ping Lee and others, 'Deepfakes, Phrenology, Surveillance, and More! A Taxonomy of AI Privacy Risks' [2024] Proceedings of the CHI Conference on Human Factors in Computing Systems 11.

[41] For an example of such a case see: Caleb Onah and Chinelo Helen Ogwuche, 'Behavioural Manipulation, Regulations and Oversight of Artificial Intelligence (AI) in Political Campaigns and Elections in Nigeria' [2023] Theme: Post-Election Era: Ethnicity, Insecurity and National Development 1.

[42] Margrethe Vestager, EU Competition Commissioner, 'Making Markets Work for People' (Schumpeter Award Acceptance speech at the EGG Brussels, 27 October 2022) <https://competitionpolicy.ec.europa.eu/about/reaching-out/making-markets-work-people_en> accessed 29 May 2011.

[43] Giorgio Monti, 'Four Options for a Greener Competition Law' [2020] Journal of European Competition Law & Practice 124.

[44] See Arianna Andreangeli, 'Competition Law and Fundamental Rights' [2017] Journal of European Competition Law & Practice 524; Peter Oliver and Thomas Bombois, 'Competition and Fundamental Rights' [2016] Journal of European Competition Law & Practice 711; Jérémie Jourdan, 'Competition Law and Fundamental Rights' [2018] Journal of European Competition Law & Practice 666.

[45] OECD, *Are Competition and Democracy Symbiotic?* (2017).

[46] Anna Gerbrandy, 'Revisiting the Concept of Power in the Digital Era' in Oles Andriychuk (ed), *Antitrust and the Bounds of Power – 25 Years On* (Bloomsbury 2023).

combat the issues posed by Modern Bigness (and, if successful, to what degree can such legislation pave the way for competition law's foundational renewal).

1.3 Research Question

Based on the foregoing, my research question reads as follows:

Can human-centric AI as conceptualised in the EU AI Act help broaden the aims of competition law and in doing so counterbalance Modern Bigness?

The goal of this question is twofold. First, I would like to examine whether the AI Act's human-centric approach could influence competition law and its objectives. The second step is to determine if this influence could lead to a more efficient response to challenges posed by Modern Bigness. Understanding the conceptual role of a human-centric approach to AI could lead to better decisions in disputes concerning internal market players, fundamental rights,[47] and competition law. Further, it can help create a more coherent legal framework for regulating AI at the EU level.

1.4 Research Methodology

This work analyses the AI Act and in particular its human-centric approach - what it is and what it means for competition law. Before delving further, I would like to first draw attention to the method that I will be using to conduct this analysis, namely legal doctrinal methodology. Legal Doctrinal Research (LDR) is the most frequently employed method in legal.[48] The utilisation of LDR in both practice and academia has established it as a widely utilised and indispensable tool in the realm of legal research. Consequently, it is occasionally observed that 'the doctrinal method is often so implicit and so tacit that many working within the legal paradigm consider that it is unnecessary to verbalise the process.'[49] Given that doctrine lies at the core of law, it is crucial to comprehend it through a focus on fundamental principles and facts.[50] This process entails extracting ideas from various sources and consolidating them through synthesis.[51] Despite criticisms that doctrinal legal

[47] While there is some debate over the usage of 'fundamental rights' over 'human rights' (primarily over the argument that 'human rights' is better suited for the field of international law and 'fundamental rights' for EU law), in this work I consider the two to be similar enough to be used interchangeably. See for more on the distinction: EU Agency for Fundamental Rights, 'What are fundamental rights?' (FRA Europa) <https://fra.europa.eu/en/content/what-are-fundamental-rights> accessed 14 May 2024.

[48] P Ishwara Bhat, *Ideas and Methods of Legal Research* (Oxford University Press 2019).

[49] Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' [2012] Deakin Law Review 83, 99.

[50] P Ishwara Bhat, *Ideas and Methods of Legal Research* (Oxford University Press 2019).

[51] Terry Hutchinson, 'Doctrinal Research' in Dawn Watkins and Mandy Burton (eds), *Research Methods in Law* (Routledge 2013).

research is overly theoretical, elitist, and disconnected from real-world issues, its enduring influence and importance underscore its value.[52]

A doctrinal approach starts with the assumption that the legal system being studied (here EU competition law) is logically coherent, and each new legal text (here the AI Act) is analysed and assessed for its compatibility within this system. In this process, reliance is placed on the legal system itself to establish categories, concepts, and benchmarks for evaluation rather than borrowing from another field of study.[53] Doctrinal research offers the advantage of ensuring consistency and coherence within the legal system by analysing and interpreting provisions, case law, and legal principles. Through identifying gaps and ambiguities in the law, doctrinal research serves to inform legislative reforms and contributes to the creation of a more robust legal framework. The insights derived from doctrinal research frequently serve as a cornerstone for subsequent empirical studies and interdisciplinary approaches, thus helping bridge the divide between theory and practice.[54] As legal challenges become progressively complex in a globalised world, the LDR methodology retains its significance in navigating and tackling these intricacies. It ensures that the legal system can adapt and respond effectively to new developments.[55] Therefore, legal doctrinal research can offer the internal coherence and conceptual clarity essential for a more profound understanding of the proposed topic.

Further, I would like to briefly mention the terminological choice of this thesis. In the upcoming chapters I will discuss in detail the theoretical and practical implications of various concepts. To avoid an endless (but tempting) terminology debate, however, I will occasionally use narrow definitions for some of these notions.[56] For instance, I understand 'European values' to refer to the values laid out in the Treaty of Lisbon (respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights)[57] instead of taking a wider view.[58]

With these methodological choices I aim to provide a usable framework through which to elucidate and contextualise the concept of human-centric AI within competition law. In doing so, I hope to reveal the bigger picture of this concept, highlighting its implications for the field.

Lastly, a mention of the limitations of this work. Given the novelty of the topic and the ongoing regulatory developments, this thesis is not a conclusive statement on the matter. Rather, it should be

[52] See: P Ishwara Bhat, *Ideas and Methods of Legal Research* (Oxford University Press 2019) and Terry Hutchinson, 'Doctrinal Research' in Dawn Watkins and Mandy Burton (eds), *Research Methods in Law* (Routledge 2013).

[53] P Ishwara Bhat, *Ideas and Methods of Legal Research* (Oxford University Press 2019).

[54] Terry Hutchinson, 'Doctrinal Research' in Dawn Watkins and Mandy Burton (eds), *Research Methods in Law* (Routledge 2013).

[55] Ibid.

[56] See section 1.6 of this Chapter.

[57] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community [2007] OJ C 306.

[58] For instance John McCormick came up with fourteen different European values in his work *Europeanism* (Oxford University Press 2010), while Jürgen Habermas and Jacques Derrida came up with five, all distinct from those of the Lisbon Treaty. See 'February 15, or What Binds Europe Together: Plea for a Common Foreign Policy, Beginning in Core Europe', in Frankfurter Allgemeine Zeitung, 31 May 2003.

seen as a contribution to the ever-growing body of literature on the topic of Bigness and competition law.

1.5 Structure of the Thesis

This thesis is comprised of five chapters. The first two represent the theoretical groundwork. In Chapter I, I lay out the research question, methods, limitations, and core concepts of this work. In the second Chapter, I attempt to define the concept of Modern Bigness. I dedicate a chapter to this concept alone due to its novelty in the academic jargon as well as its relevance for answering the research question. In doing so, I start with a legal-historical overview of how the concept of Bigness has developed in American and European legal scholarship.[59] Clarifying the term fulfils two objectives. First, it places it in the context of EU competition law. Second, it sets the ground for answering the research question.

Chapters III and IV build upon these findings and interconnect the concept of 'Modern Bigness' with competition law and the AI Act. As such, they form the 'core' of this work. In Chapter III, I present the impacts that the Act is likely to have on EU provision of competition law and whether they could help counterbalance (some of) the effects of Modern Bigness. A duty to create human-centric AI could impact tech companies by potentially curbing some of their anti-competitive behaviour as well as their ever-growing influence.[60] Likewise, it can also amount to nothing. If unenforced, a human-centric requirement becomes tech 'greenwashing'[61]: an empty word used to placate growing concerns. In Chapter IV, I build upon the previous findings to discuss what the impacts of the AI Act could be on the aims of competition law. I analyse the various modalities for the Act to be integrated within the EU competition legal framework. Chapter V represents the conclusion, where I summarise my findings.

1.6 Terminology

What is in a name?

At the core of this work sit terms such as 'Modern Bigness', 'human-centric AI' and 'consumer welfare.'

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[59] I would also like to quickly note that more specific approaches to research (such as the legal historical one) are understood as part of Legal Doctrinal Research. As such, there is no mention of a separate, 'historical' methodology in the Chapter's methodology section. See: P Ishwara Bhat, *Ideas and Methods of Legal Research* (Oxford University Press 2019).

[60] See introductory paragraph.

[61] Greenwashing can be understood as an act of spreading disinformation to consumers about a product or service's alleged environmental benefits. The claim generally concerns a positive effect on the environment that in reality is lacking. See for an explanation of the term in further detail Lauren Baum, 'It's Not Easy Being Green ... Or Is It? A content analysis of environmental claims in magazine advertisements from the United States and United Kingdom' [2012] Environ Communication 423.

While these concepts will be expanded upon in the following chapters, this thesis juggles with more than just the above-mentioned notions. Below I offer an alphabetical overview of other terms that appear in the coming pages. Unlike human-centric AI or Modern Bigness, these terms have infiltrated public jargon to a larger degree. For example, I expect the readership to be somewhat familiar with concepts such as Artificial Intelligence and Data mining. Nonetheless, I include these more commonly used terms in the terminology section to improve this work's flow. By providing key definitions in the first Chapter I hope to ensure more seamless reading, unburdened by explanatory additions.

Algorithms

While this term is not defined in EU legislation, we can understand algorithms in their most straightforward sense as a set of rules that must be followed by a computer to solve a problem.[62] An AI algorithm is then an algorithm that allows a computer to learn by itself how to operate.[63]

Artificial Intelligence

The popular image of Artificial Intelligence (AI) is often one entrenched in fiction. There is perhaps a tendency for some to view AI as self-aware, human-like machinery. This type of AI is labelled Artificial Superintelligence or AGI (Artificial General Intelligence). Rather than the current dominant form of AI, this version represents the pinnacle of future AI development.[64] To ensure certainty, my thesis uses the definition of Artificial Intelligence that is provided by the Act. The Act understands AI as 'a machine-based system that is designed to operate with varying levels of autonomy, and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.'[65]

To further elaborate on the topic, the kinds of Artificial Intelligence most commonly employed by companies are, at the moment of writing, Reactive, Limited Memory and Generative AI. Reactive AI is the oldest form of artificial intelligence. As the name suggests, it reacts to the data that it is provided with, always in the same manner. This does not entail independent or creative thought but rather a superpowered capacity for data analysis. For instance, algorithms that analyse your purchase history and provide further shopping recommendations. Limited Memory AI is somewhat more complex since it operates on the basis of a more intricate existing memory. Self-driving vehicles or chatbots, for example, use a form of limited memory. Generative AI is a broader type of artificial intelligence which covers machine learning solutions that utilise extensive data sets to generate responses according to user inputs.[66] Perhaps the most well-known example of this is ChatGPT,

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[62] OECD, *Algorithms and Collusion - Note from the European Union* (2017).

[63] Devanshi Dhall, Ravinder Kaur, and Mamta Juneja, 'Machine Learning: A Review of the Algorithms and Its Applications' (International Conference on Recent Innovations in Computing, Jammu, 22 November 2019) < https://link.springer.com/book/10.1007/978-3-030-29407-6> 14 May 2024.

[64] Roman V. Yampolskiy, *Artificial Superintelligence: A Futuristic Approach* (Taylor and Francis 2015).

[65] EU AI Act, Article 3 para 1.

[66] Henrik Skaug Sætra, 'Generative AI: Here to stay, but for good?' [2023] Technology in Society 1.

which takes the form of a 'personal assistant' that responds to user prompts. In the Act, generative AI is viewed as a form of general-purpose AI, as it can perform a high number of different tasks.[67]

Big Tech

Big Tech, also known as the Tech Giants or the Big Five,[68] refers to the world's most dominant technology companies. In other words, Alphabet (the parent company of Google), Amazon, Apple, Meta (formerly known as Facebook), and Microsoft.[69] The concept of Big Tech has equivalents in other market sectors where a few enterprises occupy a dominant role, such as in the case of Big Oil, Big Media or the Big Three consulting firms.[70]

Consumer and User

Across the EU legal instruments, there is no unitary definition of what a consumer is.

However, most existing definitions define a consumer as a 'natural person who acts outside the scope of an economic activity (trade, business, craft, liberal profession).'[71] A consumer is thus someone who obtains a good or service through a transaction and uses the purchase for primarily personal purposes.[72]

A user is someone defined through engagement rather than paying. Whether looking at a service, product or other system, a user is a natural person who engages with the material by, for instance, using it or interacting with it.

The difference between a consumer and a user is as such a financial one. The consumer purchases a good or a service. The user, in many cases, can enjoy a service without paying for it.[73] However, this difference is being challenged by the fact that it is becoming more and more evident that there are no services that come without payment. Hence the popular idea is of data having become the new oil. While this comparison was intended to mean that data, much like oil, is most useful after being processed[74], it now carries a different meaning. Data has become a most valuable resource as it can be used by companies to derive customer insights.[75]

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[67] EU AI Act, Recitals 97, 105.

[68] Kean Birch and Kelly Bronson, 'Big Tech' [2022] Science as Culture 1.

[69] Alison Beard, 'Can Big Tech Be Disrupted?' (*Harvard Business Review*, 14 December 2021) <https://hbr.org/2022/01/can-big-tech-be-disrupted> accessed 11 February 2024.

[70] Walter Adams and James W Brock, *The Bigness Complex: Industry, Labor, and Government in the American Economy* (2nd edition, Stanford University Press 2004).

[71] European Parliament, Library Briefing on the notion of 'consumer' in EU law, 06 May 2013.

[72] Ibid.

[73] While this is not always the case, with many social media platforms, users do not have to pay for its usage (or for at least the core functions of the website, for example platforms such as Twitter/X have both 'free' and for-pay' options).

[74] Dennis D Hirsch, 'The Glass House Effect: Big Data, the New Oil, and the Power of Analogy' [2014] Maine Law Review 373.

[75] Alexander Wieneke and Christiane Lehrer, 'Generating and exploiting customer insights from social media data' [2016] Electronic Markets 245.

Data Mining

The practice of looking for patterns and extracting data from digital information is known as data mining. By using data mining software, companies can obtain details about their users' which can in turn, lead to more successful marketing.[76] However, access to a large amount of personal information can also put the right of user privacy in danger.[77]

European Values

The AI Act mentions the necessity of creating AI that adheres to fundamental rights and Union values.[78] Although the specific values are not identified within the Act, I interpret them for the purpose of this thesis as those of freedom, democracy, equality, human rights, human dignity, and the rule of law. I base this list on the EU Charter of Fundamental Rights[79] and Article 2 of the Lisbon Treaty.[80]

High-Risk AI System

The AI Act introduces alongside the notion of 'High-Risk AI systems.' With the term 'High-Risk AI' we understand any system that can cause harm[81], for example in the form of a negative impact on the safety and fundamental rights of its users.[82] The implications of the high-risk AI for competition law will be discussed in the following chapters.

Human-Centric AI

A feature of the AI Act which differentiates it from other regulations is to guard democratic and humanistic values by focusing regulation on transparency, explainability, and the human ability to understand and control AI systems.[83] As such, the EU AI Act does not merely specify technological requirements for AI systems, but rather a democratic call for human-cantered AI systems.[84] What Human-Centric AI entails will be further explained in Chapter III.

Modern Bigness

Depending on who you ask, the definition of 'Modern' can vary widely. In disciplines such as History, 'Modern' is used to refer to the Modern era of human history, which extends from 1500 AD until the present day (and is divided into early and late modern periods).[85] However, in other

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[76] Manoj Kumar Gupta and Pravin Chandra, 'A comprehensive survey of data mining' [2020] International Journal of Information Technology 1243.

[77] Helen Nissenbaum, 'Protecting Privacy in an Information Age: The Problem of Privacy in Public' in Keith W Miller, Mariarosaria Taddeo, *The Ethics of Information Technologies* (Routledge 2017).

[78] AI Act, Recital 1.

[79] EU Charter of Fundamental Rights: Charter of Fundamental Rights of the European Union [2010] OJ 2010 C 83/389.

[80] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, [2007] OJ C 306.

[81] EU AI Act, Article 3, para 2.

[82] EU AI Act, Article 6, Recitals 5, 59.

[83] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).

[84] Ibid.

[85] Hamish Scott, 'Early Modern Europe and the Idea of Early Modernity' in Hamish Scott (ed), *The Oxford Handbook of Early Modern European History, 1350-1750: Volume I: Peoples and Place* (Oxford University Press 2015).

branches of history, such as Art History, Modern (Art) is used to cover the time period between the 1860s to the 1970s.[86] For the purposes of this work, the term 'Modern' Bigness, as developed by Gerbrandy,[87] will be understood as applying to contemporary Big Tech companies. Furthermore, my aim is not to persuade readers to adopt the Modern Bigness approach within competition law or argue for its conceptual validity. Instead, this thesis works with Modern Bigness as an already established notion.

Profiling

Much like how criminal profiling entails making inferences about a person based on their activity, algorithmic profiling refers to analysing and predicting future behaviour based on online presence. An example of profiling would be using a person's social media activity to understand who they are: their age bracket, gender, and interests, the personalities of its users and advertise according to their preferences.[88]

Perhaps the most worrisome aspect about algorithmic profiling is its span. The processed personal data can be used to evaluate, assess, and predict aspects concerning a user's work performance, economic situation, health status, personal preferences, sexual orientation, interests, location, or movements.[89] Much like data mining, profiling, while providing a competitive advantage, risks breaching one's privacy rights.

Power

The traditional competition law understanding of power paints it as somewhat of a straightforward concept. Power here refers to market power, which is 'the ability to profitably maintain output in terms of product quantities, product quality, and variety or innovation below competitive levels for a period of time.'[90] A powerful company is, therefore, a company that has a dominant market position and can, through abuse of this position, [91] subjugate smaller companies.

Modern Bigness builds upon this understanding. Power in the context of Modern Bigness refers not only to market power. It entails an ability to coerce, intimidate, and impose standards within the public sphere both in a financial and social sense.[92]

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[86] Hans Werner Holzwarth, *Modern Art. A History from Impressionism to Today* (Taschen 2016).

[87] Anna Gerbrandy, 'Conceptualizing Big Tech as 'Modern Bigness' and its implications for European Competition Law', European research Council Proposal <https://cordis.europa.eu/project/id/852005> accessed 19 May 2024.

[88] Jeff Chester, *Cookie Wars: How New Data Profiling and Targeting Techniques Threaten Citizens and Consumers in the "Big Data" Era* (Springer 2012).

[89] European Commission, Regulation 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, and repealing Directive 95/46/EC (General Data Protection Regulation/GDPR) [2016] OJ L 119/1, Article 4.4.

[90] European Commission, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] 2011/C 11/01, 13.

[91] Consolidated version of the Treaty on the Functioning of the European Union (TFEU), 13 December 2007, 2008/C 115/01, Article 102.

[92] See Chapter II.

1.7 Other remarks

Style and Voice

Inspired by the style of European Scholars such as Giuliano Amato, I write using a succinct style of prose. This work covers many theory-heavy topics, but I wish for it to be easily read. Further, by using a more straightforward style of writing I hope to make this work more accessible for anyone not well-versed in the topic. Inspired by the style of American legal scholars, such as Martha Nussbaum and Cass Sunstein, I write using the pronouns 'I' and 'We'.[93] Further, I would like to mention that this work has been conducted without funding and as such there are no financial ties to disclose.

Capitalisation

Compound structures such as Big Tech are capitalised for emphasis[94] while Modern Bigness is capitalised to comply with the original author's usage.[95]

[93] A practice which has been growing in the field of Social Sciences. See Ken Hyland *Disciplinary discourses: Social interactions in academic writing* (University of Michigan Press 2004).

[94] Authorial choice, as with the exception of Modern Bigness, scholarship provides mixed usage of these capitalisations- thus no comprehensive framework is in place.

[95] Anna Gerbrandy, 'Conceptualizing Big Tech as 'Modern Bigness' and its implications for European Competition Law', European research Council Proposal <https://cordis.europa.eu/project/id/852005> accessed 19 May 2024.

Chapter 2: Modern Bigness

1. Introduction

This chapter focuses on one apparently simple question:

What is 'Bigness'?

I argue that the creation of competition law can be seen as a response to the emergence of corporate Bigness. Because of this, discussions on Bigness can be difficult to separate from discussions on the origins and aims of competition law itself.

The term Bigness was first used by an American judge to describe the societal influence of the largest companies of the United States in the 20th century. In his vision, Bigness will always be at odds with a democratic society.[96] But as time passes, the idea of what Bigness is and how competition law should respond to it evolves. Economic schools of thought such as Harvard, Chicago, Post-Chicago or the Neo-Brandeisian and Ordoliberal movements all provide different perspectives on Bigness - as a curse, as efficiency, as both detached from and inseparable from consumer welfare. Sometimes we grow worried about the consequences of Bigness, and we look towards competition law to give us a solution. Other times we push these worries aside and enjoy the advantages that Big Businesses have to offer.

Currently the pendulum in both the EU and the US seems to have swung in favour of legitimate worries.[97]

It is also where it has started.

2. The American perspective on Bigness

2.1 Bigness according to the Sherman Act

The 1890 Sherman Act[98] is seen as the first modern competition law.[99] Its adoption, some might say, came as no surprise. In as much as laws can be said to reflect the character of a country, the Sherman Act was the concretisation of what historian William Letwin viewed as the oldest habit in America - a hatred of monopoly.[100] Much of early US History is after all characterised by a fight against the accumulation of power by a small elite. Sometimes this elite takes the form of a monarchy.

[96] Louis D Brandeis, *Other People's Money and How the Bankers Use It* (Frederik A. Stokes Company Publishers 1914).

[97] I acknowledge however that other parts of the world might have a different perspective on Big Techs.

[98] Sherman Antitrust Act 1890 (US), 15 U.S.C. § 1 - 7.

[99] Or better adapted to the American jargon, antitrust law.

[100] William Letwin, *Law and Economic Policy in America: The Evolution of the Sherman Antitrust Act* (The University of Chicago Press 1965) and Clifford A. Jones, 'Foundations of competition policy in the EU and USA: conflict, convergence and beyond' in Hanns Ulrich (ed), *The Evolution of European Competition Law* (Edward Elgar 2006).

Sometimes it is an over-controlling Big Government.[101] But the idea remains the same - no small group should be allowed to become too Big. After the industrial revolution, Bigness came to be associated not only with public but also private power. Big Oil, Big Sugar, Big Railways, Big Steel, Big Tobacco, Big Rubber, Big Coal.[102] Large, market-dominant companies emerge at the same time in a number of different fields. Owners of smaller companies begin to worry. These are not unfounded worries. Big companies tended to engage in ethically dubious practices. Take for instance the praxis of 'pooling' promoted by Standard Oil's John D. Rockefeller.[103] Through strategic manipulation of voting proxies within their respective boards, managers from competing companies would go on to establish pricing and market strategies together. This form of cartel-building would lead to large monopolies that would have almost full control over an industry.[104] Despite attempts to outlaw or at least curb the formation of trusts, the actual enforcement and prevention proved difficult.[105] There was a need for a stronger legislation that would yield better enforcement results. Enter the Sherman Act, a new and some could say revolutionary piece of legislation. For the first time, practices such as price-fixing were explicitly forbidden. This Act was well-intended. And it was generally effective.[106] However it was also incomplete. It did not provide explicit definitions of what anti- or pro- competitive behaviour was, nor offered a yardstick to determine when exactly behaviour became dangerous for competition. And, most certainly, it did not define *Bigness*. Antitrust legislation continues instead to develop after the Sherman Act on a case-to-case basis.[107] As such, judges, particularly at the Supreme Court level, step in to fill these gaps through their rulings. One of the judges who I would like to draw attention to is Louis Brandeis.

2.2 Bigness according to Louis Brandeis

Judge Louis Brandeis has brought many contributions to American law. He has helped develop the legal concept of a right to privacy,[108] contributed to the development of consumer protection laws and regulations and played a key role in shaping First Amendment jurisprudence (right to free

[101] Daniel Béland, François Vergniolle de Chantal, 'Fighting "Big Government": Frames, Federalism, and Social Policy Reform in the United States' [2004] The Canadian Journal of Sociology 241.

[102] Glenn Porter, *The Rise of Big Business: 1860 - 1920* (3rd edition, Harlan Davidson 2006).

[103] Giuliano Amato, *Antitrust and the Bounds of Power: The Dilemma of Liberal Democracy in the History of the Market* (Oxford Hart 1997).

[104] Ibid.

[105] Specifically, the Interstate Commerce Act 1887 (US), Pub. L. 49-104

[106] To a point. For example the Standard Oil company still accumulated a monopoly and in 1904, 14 years after the adoption of the act had grown to accumulate 91 % of the American oil market. So while the Act did provide a foundational basis, many efforts were required to successfully take down Big companies. Interesting for the reader to know might be the fact that Brandeis himself was involved in the cases that led to the destabilisation of Standard Oil. See: Kenneth G Elzinga and Micah Webber, 'Louis Brandeis and Contemporary Antitrust Enforcement' [2017] Touro Law Review 277.

[107] Giuliano Amato, *Antitrust and the Bounds of Power: The Dilemma of Liberal Democracy in the History of the Market* (Hart Publishing 1997).

[108] Ben Bratman, 'Brandeis and Warren's "The Right to Privacy and the Birth of the Right to Privacy"' [2002] Tennessee Law Review 623.

speech).[109] He can also be credited with introducing the concept of Bigness. In 1914[110] Brandeis published a book called *Other People's Money and How the Bankers Use It.*[111] The work in its entirety is relevant for understanding how large corporations and financial institutions work. Still, there is one essay which stands out: *A Curse of Bigness.* Here, Brandeis argues that Bigness in the form of powerful market players is an inherent threat to democracy and individual liberties. Allowing companies to accumulate vast amounts of market power guarantees that abuse will take place. Such power is either obtained through unfair means or will be used for unfair means. What society needs instead is a form of economic organisation that not only facilitates efficiency but also preserves competition, innovation, and societal well-being.[112] At the core of Brandeis's approach was the conviction that Bigness is always dangerous. A common counterargument to his stance was that Big companies are not incompatible with democracy because they provide greater efficiency. However, Brandeis' position remained firm: the disadvantages of size outweigh in many respects the advantage of size.[113] This vision was later applied to real-life cases during Brandeis' tenure at the Supreme Court. An example of the 'Curse of Bigness' approach in action is the landmark judgement of *Louis K. Liggett Co. v Lee*.[114]

Louis K. Liggett Co. was a chain-store business that operated many drug stores across the US, including several in the State of Florida. The company contested the constitutionality of a Florida law that limited increased taxation when a company opened stores in more than one county.[115] The case reached the US Supreme Court. There, the majority of judges ruled that increased taxation per number of stores was unconstitutional.[116] Brandeis however held the view that the State had a legitimate interest in preventing the economic and social effects associated with the growth of chain stores.[117] In his dissenting opinion, Brandeis described the 'evils attendant upon the free and unrestricted use of the corporate mechanism' and pointed that his generation had accepted corporate Bigness as the 'inescapable price of civilised life.'[118] This decision remains relevant because it reflects that societal and economic worries regarding Bigness were not necessarily shared across the Supreme Court (or one can say, within American society). Early dissent over how to respond to the behaviour of Big companies is illustrative of the debates to come.

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[109] Geoffrey R Stone, 'Reflections on the First Amendment: The Evolution of the American Jurisprudence of Free Expression' [1987] Proceedings of the American Philosophical Society 251.

[110] Later to be republished in 1933, hence in literature on the topic the date of the book is referred to with this date of publication.

[111] Louis D Brandeis, *Other People's Money and How the Bankers Use It* (Frederik A. Stokes Company Publishers 1914).

[112] Ibid.

[113] Richard P Adelstein, '"Islands of Conscious Power": Louis D. Brandeis and the Modern Corporation', [1989] The Business History Review 614.

[114] Louis K. Liggett Co. v Lee [1933] 288 US 517.

[115] Ibid.

[116] Ibid.

[117] Ibid, Dissenting Opinion of Judge Brandeis.

[118] Ibid.

2.3 Bigness according to the Harvard School and the Chicago School

While it could be interesting to explore all incremental developments in antitrust, for the sake of brevity I propose a slight time-skip to the second half of the 20th century. Around this time two distinct theories gained traction: Harvard School's 'workable competition' theory[119] and Chicago School's 'self-correcting market' theory. These economic theories would shape antitrust in future decades.

The Harvard School followed the view that markets are fragile. Because markets are fragile, antitrust law must step in as a protector against Bigness. It has to intervene to protect small businesses from bigger entities. This reaction to Bigness was sometimes deemed 'populist.'[120] It was an approach hostile towards wealth and power and inherently suspicious of capitalism.[121] However, Harvard views had an empirical foundation. They were based on studies (conducted from 1930-1950) which focused on American industries, rather than on a purely theoretical model.[122] The conclusions of these studies seemed to echo those of Brandeis some years earlier. Most industries were more concentrated than was necessary. Barriers to entry were widespread and very high. In this monopolistic landscape it was difficult for smaller companies to enter the markets or for customers to have access to fairly priced goods and services.[123] The conclusions of these studies were clear - companies with a big market power are bad for society. These conclusions also coincided with a trend in Congress policies which sought to protect small businesses against Bigger companies.[124] As a result of Harvard research and US Congress policies, the 1960s saw a more interventionist approach to antitrust.[125] However, this approach had its critics, in particular in the form of scholars from the University of Chicago. This Chicago School argued that the conclusions drawn from the Harvard empirical studies were flawed. The studies wrongly assumed various entries to be pervasive and mistakenly found economies of scale to be rare.[126] Consequently, the policy of condemning so many business practices as anti-competitive was misconceived.[127]

The Chicago School proposes instead a different thesis: that markets are not fragile. Because of this, Big companies are not an inherent threat to antitrust. But inefficiency is. Under the Chicago School, the aim of antitrust is clear: protecting 'consumer welfare.' This term, now ubiquitous in antitrust literature, was coined by Judge Robert Bork.[128] Bork is somewhat of an anti-Brandeis. Bork regarded the goal of antitrust as the maximisation of consumer welfare (economic efficiency with the goal of

[119] It is good to note that while the Harvard School did not create this theory, its work was based on it and as such popularised it. See Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[120] It is illustrative of what Judge Richard Posner described as 'populist.' See: Richard A Posner, *Antitrust Law* (2nd edition, University of Chicago Press 2001) as well as Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[121] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[122] Ibid.
[123] William Page, 'The Ideological Origins and Evolution of U.S. Antitrust Law' [2005] Issues in Competition Law and Policy.
[124] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[125] Ibid.
[126] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[127] Ibid.
[128] Robert H Bork, *The Antitrust Paradox* (Free Press 1978).

'the maximization of wealth').[129] Bork views the idea that antitrust should focus on other, more social goals as somewhat of a non sequitur. After all, no body of law can respond to all challenges that society faces.[130] Further, the view of Bork and other Chicagoans was that the pursuit of efficiency as the goal of competition law is non-political. This would make it ideologically-free and thus more desirable than a Brandeisian approach.[131]

As previously stated, consumer welfare views the purpose of antitrust as ensuring low prices. If prices are low, output is maximised, resources are allocated efficiently, and competition prospers.[132] Still, not all price-increasing conduct is unlawful. This comes from the Chicago view that markets are self-correcting instead of fragile. In essence, markets can adjust and return to a state of equilibrium without external intervention.[133] Only anti-competitive behaviours that prevent this self-correction (e.g. price-fixing) are condemned. Some opine that a consequence of this approach has been a more relaxed enforcement of antitrust.[134] Enforcers saw less need to restrict conduct that helped firms grow larger, such as mergers. There are a couple of reasons for upholding such an approach. First, because the market will compete away any supra-competitive prices. Second, large firms tend to be more efficient. This either translates to lower prices or outweighs the harm to welfare caused by price increases.[135] Thus, a Chicagoan perspective acknowledges the existence of Bigness. But it does not see it as an automatic issue. The social ramifications of Bigness are also not understood as something that falls within the purview of antitrust. Gone is the perspective that the antitrust laws protect us from *A Curse of Bigness* or an 'industrial dictatorship' of Big companies.[136] A market with a lot of small competitors is not more desirable than one with only a handful of large competitors.[137] Many felt that this was a good scenario. Because of scale efficiencies, Big Businesses can operate at lower cost. In turn, this means lower prices and better services for the consumers.[138] Still, you would not be wrong for questioning how the Chicago approach became so influential. We are after all, looking at a country that had previously been sensible to the socio-political impacts of Bigness. A full answer could probably take the form of a book. A shorter answer is: the US was undergoing major changes. Economically, there was a rise of 'stagflation', an occurrence where inflation rises at the same time as economic growth stagnates.[139] Politically, this led to people feeling that the Government is the problem, and not the solution. This aligns well with the Chicago prioritisation of consumer welfare

[129] Ibid, 70. Similarly, according to Bork, consumer welfare was 'merely another term for the wealth of the nation' (90).
[130] Ibid.
[131] Ibid. Whether this goal is entirely non-political can however be debated.
[132] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[133] Barak Y Orbach, 'The Antitrust Consumer Welfare Paradox' [2010] Journal of Competition Law & Economics 133.
[134] Ibid.
[135] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[136] Frank Delano Roosevelt, 'A Rendezvous With Destiny' (Speech at the 1936 Democratic National Convention Philadelphia, Pennsylvania, 27 June 1936)
<https://www.austincc.edu/lpatrick/his2341/fdr36acceptancespeech.html> accessed 19 March 2024.
[137] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).
[138] Ibid.
[139] Ibid.

and a more hands-off approach. This context makes the decade-long influence of the Chicago School somewhat unsurprising.

2.4 Bigness according to the Post-Chicago School

We make another time-jump, now to the present-day debate on antitrust law and its purpose. Here, two camps can be distinguished: the Post-Chicago School and the Neo-Brandeisians.

Like the Chicago school, the Post-Chicago School maintained a focus on consumer welfare. Unlike the Chicago School, they recognised the importance of social, political, and economic factors on the market. Still, the Post-Chicago are not Brandeisian in their approach. At the heart of this view is still a preference for minimal government intervention in the markets. A free-market economy is not just a way to economic prosperity but also a representation of individual freedom and autonomy.[140] The assumption is that a free-market system leads to a fair distribution of welfare. Since everyone has equal access to the market, it is a level playing field.[141] According to this perspective, antitrust law should be used with caution. It should only be invoked if there is harm to consumer welfare, such as unjustifiably high prices. The approach to issues of Bigness and Big Tech dominance is as result also more hands-off in nature.[142]

2.5 Bigness according to the Neo-Brandeisians

Rarely does a school of thought exist without opposition. Chicago and Post-Chicago ideas find their counterpart in the Neo (New)-Brandeisians. Baptised after Judge Louis Brandeis, this current can be described with one word: *progressive*. Neo-Brandeisians are against market power concentration and draw many of their arguments from Brandeis' anti-monopoly doctrines. Neo-Brandeisians argue that when thinking about the aims of antitrust, we need to think beyond consumer welfare. Market issues cannot be separated from political and social issues. Antitrust regulators must incorporate broader criteria into their considerations. In particular, more attention should be given to 'the impact of corporate consolidation on the labor market, underserved communities, and racial equity.'[143]

Their approach to Bigness is more in line with it being a 'curse' that requires regulation. Neo-Brandeisians have been critical of presidential administrations of the recent decades (across both

[140] Ibid.

[141] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

[142] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008). See also: Daniel A. Crane, 'Chicago, Post-Chicago, and Neo-Chicago. Review of How Chicago Overshot the Mark: The Effect of Conservative Economic Analysis on U.S. Antitrust' [2009] University of Chicago Law Review 1911.

[143] Biden-Sanders Unity Task Force Recommendations, *Economy Unity Task Force Recommendations* (Biden-Sanders Unity Task Force 2020), 67.

party lines) for failing to properly enforce antitrust laws and allowing the US economy to become dominated by a few Big companies. Like Brandeis, they maintain that the influence of large companies has gone beyond just market influence and now poses a significant threat to democracy.[144] Relying just on the consumer welfare standard is inadequate for addressing the challenges created by Big companies, especially Big Tech. While the Neo-Brandeisian movement has been around since the 1930s (appearing as reaction to the perceived failures of the First New Deal)[145], it has gained more traction starting with the 2010s.[146] Although the last two presidential administrations (Obama and Trump) did not prioritise changes in the approaches and aims of antitrust, we see the Biden administration (2020 - present) embrace Neo-Brandeisianism more openly.[147] We see this with the appointment of self-described Neo-Brandeisians Lina Khan, Tim Wu, and Jonathan Kanter in key antitrust positions within the Government.[148] Such appointments have resulted in a reform in antitrust enforcement. We have seen mergers between Big companies be prevented.[149] We have seen tech giants such as Google be taken to Court in what was the first major monopolisation case in 21st century America.[150] We have seen new bills introduced to improve the existing antitrust legislative system.[151] And while discussions can be had (and have been had) about the overall efficiency of these measures, it is clear that the American approach to antitrust and its aims has become more Brandeisian in the last four years.

But can the same be said about Europe?

3. The European perspective on Bigness

3.1 Introduction

When compared to its American counterpart, EU discourse on the objectives of competition law *might* appear less polarised. There are a few regulations, directives and treaties provisions that apply

[144] Daniel A Crane, 'How Much Brandeis Do the Neo-Brandeisians Want?' [2019] The Antitrust Bulletin 479.

[145] Timothy Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports 2018).

[146] Ibid. See also: Daniel A Crane, 'How Much Brandeis Do the Neo-Brandeisians Want?' [2019] The Antitrust Bulletin 479.

[147] Which has definitely been criticised. See for instance, Aurelien Portuese, 'Biden Antitrust: The Paradox of the New Antitrust Populism' [2022] Georgetown Mason Law Review 440.

[148] Justin Lindeboom, 'Two Challenges for Neo-Brandeisian Antitrust. Antitrust Bulletin' [2023] The Antitrust Bulletin 363.

[149] Callum Jones, 'Largest-Ever US Supermarket Merger Faces Block over Fears of Price Hikes' (*The Guardian*, 26 February 2024) <https://www.theguardian.com/us-news/2024/feb/26/kroger-albertsons-grocery-merger-blocked-ftc> accessed 17 March 2024.

[150] David Mccabe and Cecilia Kang, 'In Its First Monopoly Trial of Modern Internet Era, U.S. Sets Sights on Google' (*The New York Times*, 6 September 2023) <https://www.nytimes.com/2023/09/06/technology/modern-internet-first-monopoly-trial-us-google-dominance.html> accessed 30 March 2024.

[151] Specifically, the proposed amendments to section 8 of the Clayton Act 1914 (US), 15 U.S.C. § 12 - 27; 29 U.S.C. § 52 - 53 (also known as the Competition and Antitrust Law Enforcement Reform Act). It mirrors the prevailing perspective that antitrust laws suffer from structural weaknesses, permitting unchecked and inadequately scrutinised mergers. The bill has a direct impact on firms with a market share exceeding 50 %, either as sellers or buyers, or that wield substantial market power. Notably, the legislation is not tailored to a specific industry but remains applicable across sectors.

across all Member States and that clearly define the aims of competition law.[152] This should in theory mean less debate between different camps. However, that is not entirely the case. The EU is not as homogenous as the US. It comprises numerous States, each with their own history, language, and competition law systems. This diversity already sets the table for complications. Seemingly straightforward questions such as 'What are the aims of EU competition law?' (not to mention, more challenging ones such as 'What is the place of Bigness in EU competition law?') become difficult to answer.

When I discuss competition law in Europe I identify one predominant perspective, namely the *Ordoliberal* approach. Still, I do acknowledge that the Ordoliberal approach to competition is not the only one. It certainly finds an opposite in the French dirigiste ideology.[153] However, I focus my analysis on Ordoliberalism given its prominence throughout European competition law thought. In doing so, I follow the previous sections and begin with a historical overview.

3.2 Competition law in Europe: Origins

At a time where Congress was passing the Sherman Act, Austria was creating the first proposal for a law to restrict anti-competitive practices.[154] This proposal was focused on preventing cartelisation. Similar to trusts in late 19th century America, cartels in Austria had become dominant forces in the economy.[155] They controlled production and prices across multiple industries and used their market power to raise prices for consumers while lowering suppliers' prices. At first, cartels were not understood as particularly bad - in fact many viewed cartelisation as good for the economy. Big Cartels provided a semblance of economic order and helped improve competition. Because of this, cartels were not seen as an issue for democracy or the economy. In the beginning they were considered a necessary step in the development of capitalism.[156]

However, the more cartels grew, the less sympathy the public had for them. The cartels and the companies that comprised them had become for many *uncomfortably* Big. And the Bigger these companies became, the more aggressive their business practices turned.[157] Smaller businesses were demanding the Government stepped in to take control over cartelisation. The climate of the period was also fertile ground for more enforcement. There was at the time a growing resentment against the liberal Viennese intellectual elite. Many saw members of this group as having paved the way for

[152] Such as Articles 101, 102 and 107 TFEU.

[153] Laurent Warlouzet, 'The EEC/EU as an Evolving Compromise between French Dirigism and German Ordoliberalism (1957–1995)' [2019] Journal of Common Market Studies 77.

[154] David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

[155] Ibid.

[156] Ibid.

[157] David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

Big businesses and Big cartels' rise.[158] Anti-liberal and anti-business rhetoric was at a highpoint. It had become a common argument, embraced by political parties, old and new. It is then unsurprising that a proposal for a new law that would limit the power of cartels faced little opposition. What is however surprising is the ideological origin of this proposal and its aims. The text was heavily inspired by existing provisions within Austrian labour law.[159] The aims of labour law were transposed in relation to companies. As a result, the goal of this proto-competition law was to create a new social order that avoids abuses of power and protects the exploitation of the weak by the strong.[160] The Austrian legislation thus sought to limit unjustified uses of power. While we do not see the term 'Big' be utilised, the ideas are similar to Brandeis'. Too much Bigness in the form of market power threatens the social order by harming weaker parties (in this case smaller businesses).[161] Although these ideas never materialised in a coherent competition law system, they had a great influence across Europe.[162]

This transposition first happened in neighbouring Germany. In 1923, in response to inflation and concerns about market power, Germany implemented Europe's first competition legislation. This law drew heavily from the Austrian proposal two decades earlier. The basic ideas of this model gained widespread acceptance among scholars and officials throughout 1920s Europe.[163] However due to the tense situation in Europe around the time, the actual adoption of these ideas takes place much later.[164] After the end of World War II, many European governments turned to competition law as a means of encouraging economic revival, in light of post-war hardships. Almost all resulting competition law systems were inspired by the ideas developed during this period.[165]

3.3 Bigness according to the Ordoliberal approach

When thinking about the economic ideas of the post-1945 years, a current that cannot go unmentioned is Ordoliberalism, a school of thought born out of the activities of a group of lawyers and economists from Freiburg, Germany.[166] It was a reorientation of economic thinking after a world economic crisis. It was also a reaction against the national-socialist approaches. It was a

[158] Whether this was actually the case is, however, debatable. Many of the members of the Vienna intellectual circles were Jewish and this antipathy could also have come as a result of a wave of rising antisemitism around the time. For more on this topic see Wolfgang Maderthaner and Lisa Silverman, '"Wiener Kreise": Jewishness, Politics, and Culture in Interwar Vienna' in Deborah Holmes and Lisa Silverman (eds), *Interwar Vienna* (Boydell and Brewer 2009).

[159] Which traces its roots to Napoleonic codes if we desire to be thorough. David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

[160] David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

[161] Ibid.

[162] Ibid.

[163] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[164] The system instituted to enforce this legislation played a pivotal role in German economic and legal life during the 1920s, solidifying competition law as a tangible reality rather than mere concept. However, the social and political climate of the time impeded further progress on the adoption of competition laws. Despite this pause in development, the German experience significantly influenced the proliferation of competition law ideas.

[165] David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

[166] Catherine Barnard and Steve Peers (eds), *European Union Law* (3rd edition, Oxford University Press 2017).

response against the idea that the State should strongly intervene in the market economy.[167] Ordoliberals envisioned a rather different role for the State and its authorities. The State should first be a protector of economic and political rights. Any role beyond this needs to be regulated and limited by an economic constitution. This constitution outlines how economic transactions and interactions should occur and how resources and opportunities are distributed within society. Further, it requires that all private and public actors, including the State, have the same rights and responsibilities. This comes from the view that public authorities must refrain from interfering with the market through biased policies. Instead the State must remain neutral.[168]

For Ordoliberals, market competition is the engine of society. It propels economic efficiency and prosperity. Healthy market competition is achieved through regulation. Classical liberalism opts for a more laissez-faire stance on regulation. In contrast, Ordoliberalism stresses the importance of a strong regulatory framework to uphold fair competition.[169] Efficient regulation prevents some of the dangerous effects of Bigness from arising. With effective laws in place, there should be no monopolies or cartels to erode the competitiveness of markets.[170] At the heart of the Ordoliberal vision lies the idea of a balance between public and private power, as excess in either of the two is undesirable for society.[171] This model aims to harmonise economic growth with the goals of social justice. It acknowledges the necessity of state intervention only to rectify market failures and guarantee fair outcomes, especially for marginalised groups.[172]

3.4 Bigness according to EU competition law

The EU competition law system that emerged in the 1950s was a bit of an ideological mix. It had a definitive Ordoliberal taste with a touch of dirigisme. Competition law provisions of the Treaty of Rome were flexible enough to facilitate diverse interpretations.[173] Officials influenced by Ordoliberalism prioritised competition policy and a rule-based monetary union. Meanwhile, officials influenced by the dirigiste model pushed for more planning and industrial policy initiatives.[174] Other influences were also present, including American ones.[175] Specifically, I would like to highlight the consumer welfare standard and its influence on EU competition approaches.

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[167] Ibid.

[168] David J Gerber, *Law and Competition in Twentieth Century Europe – Protecting Prometheus* (Oxford University Press 2001).

[169] Ibid.

[170] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[171] Thomas Biebricher, Werner Bonefeld, and Peter Nedergaard (eds), *The Oxford Handbook of Ordoliberalism* (Oxford University Press 2022). See also: Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[172] Ibid.

[173] The Treaty of Rome was flexible enough to accommodate many various economic approaches (see for example Article 2 and 3). See on this topic: Laurent Warlouzet, 'The EEC/EU as an Evolving Compromise between French Dirigism and German Ordoliberalism (1957–1995)' [2019] Journal of Common Market Studies 77.

[174] Laurent Warlouzet, 'The EEC/EU as an Evolving Compromise between French Dirigism and German Ordoliberalism (1957–1995)' [2019] Journal of Common Market Studies 77.

[175] Ibid.

3.5 Bigness in the 1990s and 2000s

In the 1990s, the Commission began to align competition law with more 'modern' economic thinking. This evolution unfolded alongside the appointment of economist Mario Monti as Competition Commissioner in 1999.[176] The Commission's commitment to championing consumer welfare was becoming explicitly articulated. We see it in the 2000 Commission Guidelines on Vertical Restraints.[177] Here it is stated that the objective of competition policy is to protect and enhance consumer welfare.[178] Adding an additional layer of insight, Monti himself characterised the EC approach as dedicated to safeguarding consumer welfare.[179] He envisioned a dynamic competition policy driving lower prices, an expanded array of goods, and technological innovation - all to be achieved under the consumer welfare standard.[180] In this scenario, Bigness is a 'threat' as far as it endangers consumer welfare. Its social-political implications are left unmentioned. Focusing on consumer welfare makes it after all harder to champion other goals alongside it.

This proclamation of consumer welfare as the core objective of competition law, rather than one of its many goals, marks a clear Chicagoan shift.[181] Perhaps the tendency to prioritise economic goals in EU competition law had always been present. In the 2000s it had just become more openly stated.[182] The consumer welfare standard is apparent in the competition provisions' wording. As outlined in the 2004 guidelines on Article 81(3),[183] the goal of competition law is to protect consumer welfare.[184] While the phrasing varies from that of the Vertical Guidelines, both emphasise protecting competition in order to enhance consumer welfare.[185] This approach is further echoed in the jurisprudence of the period. In *Österreichische postsparkasse,* the European Court of Justice (ECJ) states that the 'ultimate purpose of the rules that seek to ensure that competition is not distorted in the internal market is to increase the well-being of consumers.'[186] In *GlaxoSmithKline,* the Court

[176] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[177] European Commission, 'Guidelines on Vertical Restraints' (Commission notice) COM (2000/C 291/01) final.

[178] Ibid, para 7.

[179] Mario Monti, European Competition for the 21st Century' (Speech at the Twenty-eighth Annual Conference on International Antitrust Law and Policy, sponsored by the Fordham Corporate Law Institute, New York, 20 October 2000) <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/07/265> accessed 29 May 2011.

[180] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[181] Dzmitry Bartalevich, 'The Influence of the Chicago School on the Commission's Guidelines, Notices and Block Exemption Regulations in EU Competition Policy' [2015] Journal of Common Market Studies 267.

[182] This embrace of consumer welfare was praised by the US Deputy Attorney General of the DOJ's Antitrust Division ('We in the United States applaud Commissioner Monti's bold leadership in embracing the consumer welfare model of competition policy'). William J. Kolasky, Deputy Assistant Attorney General Antitrust Division U.S. Department of Justice, 'North Atlantic Competition Policy: Converging Toward What?' (Speech at the BIICL Second Annual International and Comparative Law Conference London, 17 May 2002) <https://www.justice.gov/atr/file/519801/dl5> accessed 29 March 2024.

[183] Now article 101 TFEU.

[184] Guidelines on the application of Article 81(3) of the Treaty (2004/C 101/08), para 13.

[185] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[186] Österreichische Postsparkasse AG and Bank für Arbeit und Wirtschaft AG v Commission of the European Communities (Case T-213/01) [2006] ECR II-01601, para 115.

similarly states that the aim of competition law is 'preventing undertakings (...) from reducing the welfare of the final consumer of the products in question.'[187]

This focus on consumer welfare can in part be attributed to the economic and political situation of the time. In 2005, the mid-term evaluation of advancement towards the objectives of the Lisbon Strategy showed a rather pessimistic outlook. This prompted the Commission to advocate for a 're-launching' of the Lisbon Strategy, placing across all areas (including competition) a greater emphasis on economic growth. Then Competition Commissioner Kroes made explicit that since jobs and growth are the most urgent issues facing Europe, they should be at the heart of the next five years of competition law policy.[188] This resulted in lessened focus on social and environmental concerns.[189] Whether this was a correct decision to be made or not falls beyond this section's scope. What is important to note is that ever since its adoption, the consumer welfare standard has become characteristic of the EU's overall approach to competition.

3.6 Bigness in the 2010s

In a lacklustre economic context, it is easy to understand why such an approach became dominant within the European Union. However, nothing lasts forever. Similarly to how the pendulum has started to shift in the US, we do begin to see a shift if not in the approach, at least in the discussions surrounding the goals of competition in the Union.

In 2012, Commissioner for Competition Joaquin Almunia, described the aims of competition law in a different light from his predecessors. Almunia emphasised a competitive 'social market economy' as the core of competition policy.[190] While the 'social market economy' is somewhat of a nebulous concept itself, it can be said that it most likely entails more than just a focus on economic efficiency. It takes into consideration aims such as social equity and security.[191] The EU appears open to the future possibility of embracing a broader perspective than consumer welfare.[192] The idea is that competition law *could* be suited to deliver policy aims other than efficiency. Almunia mentions improving renewable energy approaches as a next goal for competition law. Given that worries about climate change and its effects on society start to become more serious around this time (or at least more publicly discussed), the coupling of competition with sustainability feels unavoidable.[193]

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[187] GlaxoSmithKline Services Unlimited v Commission of the European Communities (Case T-168/01) [2006] ECLI:EU:T:2006:265, para 171.

[188] Alison Jones and Brenda Sufrin, *EC Competition Law* (3rd edition, Oxford University Press 2008).

[189] Ibid.

[190] Anca D Chirita, 'A Legal-Historical Review of the EU Competition Rules [2014] International and Comparative Law Quarterly 281.

[191] Dragana Damjanovic, 'The EU market rules as social market rules: Why the EU can be a social market economy' [2013] Common Market Law Review 1685.

[192] 'Tentatively' because consumer welfare is still the dominant approach of the Commission. See Chapter IV.

[193] However it is still debatable whether this is actually feasible.

Alongside climate protection and sustainability, there is also a discussion around technology and law, in particular competition law. Much of this discussion centres on what changes must be adopted within EU competition law to respond to Big Tech's rise as well as new technologies such as Artificial Intelligence. We already see changes happen at the enforcement level. EU competition authorities have levied record fines against Big Techs in recent years.[194] However, some view the current enforcement actions as insufficient for stopping Big Techs' widespread dominance.[195] By focusing only on targeting market dominance, we can miss the socio-political influence that Big Techs hold. There is an argument for explicitly including non-economic aims in competition law. At the same time, there are voices advocating against departing from economics-based reasoning. This comes up particularly in discussions about the efficiency of competition rules in the digital economy.[196] The clash between these visions can be understood as one between Harvard and Chicago, Post-Chicago and Neo-Brandeisianism, Ordoliberalism and Dirigisme or as one between Bigness and Modern Bigness.

4. From Bigness to Modern Bigness

In the past few sections I wrote about Bigness. I traced it back to its origins and discussed it in regard to competition law. In this part I discuss Bigness itself. We are in a transitional phase of Bigness, as far as Big Techs are concerned. We are moving away from just Bigness into a new form, aptly named Modern Bigness. If Bigness is market power, then Modern Bigness is Power +. Modern Bigness is a composite form of Power. It encompasses both market as well as socio-political power.[197] This combination is particularly unique to the Big Techs.

4.1 Modern Bigness and Market power

Market power is where Bigness and Modern Bigness find common ground. A Big company is a company with considerable market power which translates into dominance in the relevant market.[198] Big Techs fulfil this criterion. The market value of the five Big Techs is on par with the size of many countries' economies and continues to grow.[199] And with great financial power come great opportunities. Some of these opportunities mean acquisitions. Big Techs often do buy competing

[194] For instance, European Commission Press Corner, 'Commission fines Apple over €1.8 billion over abusive App store rules for music streaming providers' (2024).

[195] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

[196] Ibid.

[197] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

[198] Richard Whish and David Bailey, *Competition Law* (7th edition Oxford University Press 2012).

[199] Apple and Microsoft are both worth more than $ 2 trillion; Amazon, Meta and Alphabet are valued over $1 trillion. This is similar to the economies of countries such as Italy, Brazil, and Canada. See here for more.

businesses, to solidify their own dominance. In the last few decades alone, the number of start-ups that are acquired by existing companies has risen from a mere 10 % to around 90 %.[200] Simply put, the pool of small firms capable of challenging Big Tech has shrunk, due to them being acquired before becoming public. This is a form of 'killer acquisition', where a bigger company buys a smaller one and lets it 'die' to eliminate future competition.[201] Such behaviour raises worries about the diversity of innovation[202] and the fate of small and medium business owners. It is also reminiscent of the worries that led to adoption of the Sherman Act in the US or the first legislative efforts in Austria and Germany. It echoes Brandeis' worries about Bigness leading to questionable behaviour and calls for more enforcement. But it is only a facet of Big Tech power.

4.2 Modern Bigness and Socio-Political power

Second, and this is where the schism between Bigness and Modern Bigness appears, is the aspect of political and social power.[203] Modern Bigness acknowledges that Big Techs' market power does not only pave the way for easier acquisitions and market dominance. Instead, it opens doors. It makes it easier for Big Techs to have a say in areas such as politics, giving rise to political power. It also makes it easier for them to have a say in people's private lives, giving rise to social power.

There are many ways to understand power and its nuances. It is after all one of the most at-length examined concepts within academia. Whether it is political science, history, media studies, gender studies or any other subfield of Social Sciences or Humanities, power has likely been classified and labelled from many different angles, each highlighting a particular facet of power.[204] To analyse the composite power of Big Techs, Gerbrandy and Phoa suggest adopting Doris Fuchs' theory of the dimensions of corporate power.[205] While Fuchs' theory comes from the field of International Relations, it offers a versatile framework that can be effectively applied to understand the influence of Big Tech companies.

[200] Florian Ederer and Bruno Pellegrino, 'The Great Start-up Sellout and the Rise of Oligopoly' [2023] The American Economic Association Papers and Proceedings 274. This study refers only to US start-ups.

[201] Tyrone M Carlin, Nigel Finch and Guy Ford, 'A Deal Too Far: The Case of the Killer Acquisition' in GN Gregoroiu and others (eds), *Finance and Capital Markets Series* (Palgrave McMillan 2007).

[202] James Bessen, 'How Big Technology Systems Are Slowing Innovation' (*MIT Technology Review*, 11 May 2022) <https://www.technologyreview.com/2022/02/17/1044711/technology-slowing-innovation-disruption/> accessed 30 March 2024.

[203] Throughout this work I often use the term socio-political to refer to this. I would also like to briefly address some of the terminology that I am using. When mentioning political power, I am referring to the ability to influence decision making by governments. When I discuss *social* power, I refer to the power to influence the decision-making process of individuals.

[204] Mark Haugaard and Stewart Clegg 'Why power is the central concept of the social sciences' in Mark Haugaard and Stewart Clegg (eds), *The SAGE Handbook of Power* (Sage Publications 2009).

[205] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

4.2.1 Power is instrumental

'A has power over B to the extent that he can get B to do something that B would not otherwise do.'[206] This is called instrumental power. It is a power characterised by causality. One party's acts influence the behaviour of another party. Examples are varied: instrumental power can take the form of military intervention (States sometimes engage in military intervention to influence the actions of other nations), media ownership (media conglomerates exercise instrumental power by controlling information dissemination), economic sanctions (Governments can use economic sanctions as a tool of instrumental power to influence the behaviour of other States)[207] or monetary policies (Central banks wield instrumental power through the control of monetary policy).[208] Companies have political instrumental power when they impact political and policy outcomes.[209] This can happen through media influence or through lobbying government officials and agencies to shape legislation and regulation in their favour. It can involve direct communication with policymakers, funding political campaigns, and providing expertise or research that supports their desired outcomes or campaign financing. For Big Techs, these desired outcomes often take the shape of favourable legislation or a more relaxed approach to competition law enforcement.[210] Companies such as Google, Microsoft, and Amazon invest heavily in lobbying efforts to influence government regulations and policies on AI.[211] They seek to shape legislation in ways that are favourable to their business models, ensuring minimal restrictions and favourable conditions for AI development and deployment. This influence can also manifest itself through research funding. These companies fund research initiatives and academic programs, steering the direction of AI research towards areas that align with their interests and commercial goals.[212] This not only advances their technological capabilities but also sets industry standards.

Yet Big Techs cannot go and lobby a regular individual the same way they could a politician. Instead, I argue that their instrumental social power relies on the previously mentioned infrastructure. Big Techs take advantage of their role as public service providers. They use these services to exert influence over their users. Take for example data mining, a practice used by Big Techs such as Meta.[213] The more information a company collects about a user, the better the echo chamber becomes. And a well-crafted echo-chamber solidifies an opinion, silencing debate in the process.

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[206] Robert Dahl, 'The Concept of Power' [1957] Behavioral Science 201 as quoted in Doris Fuchs, 'Commanding Heights? The Strength and Fragility of Business Power in Global Politics' [2005] Millennium: Journal of International Studies 771, 775.

[207] Jerg Gutmann, Matthias Neuenkirch, Florian Neumeier, 'The economic effects of international sanctions: An event study' [2023] Journal of Comparative Economics 1214.

[208] Timo Walter, 'The social sources of unelected power: how central banks became entrapped by infrastructural power and what this can tell us about how (not) to democratize them' in Guillaume Vallet, Sylvio Kappes, and Louis-Philippe Rochon, *Central Banking, Monetary Policy and Social Responsibility* (Edward Elgar 2022).

[209] For example see: London School of Economics, 'Policy brief: Company lobbying and climate change: good governance for Paris-aligned outcomes' (February 2022).

[210] Rebecca Klar and Klark Evers-Hillstrom, 'How Big Tech Fought Antitrust Reform - and Won' (*The Hill*, 23 December 2022) <https://thehill.com/policy/technology/3785894-how-big-tech-fought-antitrust-reform-and-won/> accessed 14 March 2024.

[211] Will Henshall, 'Tech Giants Are Vastly Outspending Newcomers on AI Lobbying' (*Time*, 30 April 2024) <https://time.com/6972134/ai-lobbying-tech-policy-surge/> accessed 4 June 2024.

[212] Anne Gerdes, 'The tech industry hijacking of the AI ethics research agenda and why we should reclaim it' [2022] Discover Artificial Intelligence 25.

[213] See Chapter I of this work.

Overexposure to a single kind of opinion can be dangerous. Think for instance of elections, where lack of access to accurate and diverse information can change the outcome of a vote.[214] Such issues will likely be exacerbated by the rise of AI. AI-based content curation (already used by Big Techs such as Meta)[215] streamlines a user's experience. It uses the data already collected about a person to offer content aligned with one's beliefs and preferences. As such it paves the way for more efficient echo-chambers and ideological isolation online.

Instrumentalist views however do not grasp the entire power of Big Techs. These views rely heavily on a cause-and-effect logic. They assume that actors always act independently, neglecting structural constraints on behaviour. Take business political power, for instance. Instrumentalist approaches miss how political elites also rely on private sector profits to shape agendas and policies.[216] Therefore, additional dimensions must be addressed to grasp the full picture of Big Techs' socio-political power.

4.2.2 Power is structural

Structural power is sometimes called the 'second face of power.'[217] It highlights how the structures shape our decisions. A structuralist perspective questions why some issues never reach the political agenda or why some legislative proposals are never made.[218] In the political sphere it is the actors with structural power that determine which topics are subjected to future legislation to begin with. However, setting the agenda for law-making is not the only example of structural power. Structural power can also take the form of corporate self-regulation. With Big Techs, this can be seen quite often. Given how difficult it is to hold private corporations accountable for problematic behaviour such as human rights violations,[219] there is a tendency to rely on Big Techs' willingness and ability to self-regulate.[220] We expect Big Techs to self-spot and self-improve their issues. This is a leap of faith which does not always bring the desired results.[221] As a consequence of this sometimes insufficiently regulated power, Big Techs could end up controlling significant portions of the AI supply chain, from hardware (like GPUs for machine learning) to software (AI development frameworks).[222] This

[214] We have seen this in the case of Brexit. The resemblance between AI-generated content and human-produced writing poses a significant concern, given AI's ability to confidently assert outdated or fabricated facts. This risk underscores the potential for the online landscape to become saturated with recycled data and artificial 'truths.'

[215] Nick Clegg, 'How AI Influences What You See on Facebook and Instagram' (*Meta*, 29 June 2023) <https://about.fb.com/news/2023/06/how-ai-ranks-content-on-facebook-and-instagram/> accessed 19 March 2024

[216] Doris Fuchs, 'Commanding Heights? The Strength and Fragility of Business Power in Global Politics' [2005] Millennium: Journal of International Studies 771.

[217] Ibid, 775.

[218] Ibid.

[219] Claire Methven O'Brien and Giulia Botta, *The Corporate Responsibility to Respect Human Rights: An Updated Status Review* (Lumen Iuris 2022).

[220] Rys Farthing and Dhakashayini Sooriyakumaran, 'Why the Era of Big Tech Self-Regulation Must End' [2021] Australian Quarterly 3.

[221] Michael A Cusumano, Annabelle Gawer, David B Yoffie, 'Can self-regulation save digital platforms?' [2021] Industrial and Corporate Change 1259.

[222] See more on the general topic of Big Tech influence over AI: Amba Kak, Sarah Myers West, Meredith Whittaker, 'Make no mistake—AI is owned by Big Tech' (*MIT Technology Review*, 5 December 2023)

dominance makes it difficult for smaller competitors to enter the market, thereby shaping the overall structure of the AI industry.

In a social sense, Big Techs structure how people communicate with one another. Interactions are essentially dictated by the architecture of these 'public infrastructure' websites. On Facebook, for instance, you can react with only a pre-set type of 'emotions' to a post. These rules and limitations for platforms set a standard that people are expected to comply with. While not the same as 'real' laws, they do shape how people are expected to communicate with one another.[223] Beyond social media there are now AI-powered personal assistants that also change our behaviour. From the tasks that we prioritise to the way that we phrase our emails, we are more often pushed to structure our behaviour and interactions in a specific way. Yet even when we take into consideration the instrumental and structural facets of power, we still miss the larger picture. This is why a third perspective is employed - discursive power. Discursive power provides a broader view by offering a sociological take on power dynamics within society.[224]

4.2.3 Power is discursive

Discursive power is an interesting facet of power. Compared to the other two, it intervenes in the political process at a broader level. It is not about existing structures. Rather, it is about the discussion surrounding these structures. As such, discursive power can bolster an actor's instrumental and structural power.[225] This comes from the idea that power is intertwined with norms and ideas. Policy decisions are often influenced by how an issue is framed and how it is aligned with specific norms and values.[226] In politics, the discursive dimension is easy to spot: just think about advertising campaigns that urge you to vote for a specific candidate or party. The candidate is often associated with a recognisable catch phrase or set of values.[227] Through their platforms, Big Techs facilitate as well as influence discourse on a particular topic. By participating in and often leading conversations about AI ethics and responsible AI use, these companies influence what is considered ethical AI practice. For example, Big Techs influence what are seen as the acceptable ethical Standards for AI usage. Their involvement in drafting ethical guidelines[228] and participating in policy setting process[229] shapes the normative frameworks within which AI operates. AI companies can also use their platforms and media influence to shape public narratives around AI.

<https://www.technologyreview.com/2023/12/05/1084393/make-no-mistake-ai-is-owned-by-big-tech/> accessed 19 May 2024.

[223] Eleanor Bird and others, *The ethics of artificial intelligence: Issues and initiatives* (European Parliamentary Research Service 2020).

[224] Doris Fuchs, 'Commanding Heights? The Strength and Fragility of Business Power in Global Politics' [2005] Millennium: Journal of International Studies 771.

[225] Ibid.

[226] Ibid.

[227] Richard Huggins, 'Discursive power – communication and politics' in Barrie Axford, Victoria Browne, Richard Huggins, Rico Isaacs (eds), *Politics* (Routledge 2018).

[228] Big Techs have created internal ethical and governance models, such as Microsoft's AI Ethics Board and Google's AI Principles to guide the creation and usage of AI technologies.

[229] Shaleen Khanal, Hongzhou Zhang, Araz Taeihagh, 'Why and how is the power of Big Tech increasing in the policy process? The case of generative AI' [2024] Policy and Society 1.

This can lead to Big Techs having the capacity to emphasise the benefits of AI, such as efficiency and innovation, while minimising legitimate concerns about privacy, the re-enforcement of gender or racial biases through AI, and large-scale job displacements.

But it is also worth mentioning that Big Techs are not the sole authors of this discourse, although they can shape it. From op-eds to news videos or memes, it is still the people who create and spread information. This is true whether they are using personal accounts or operating in the name of an organisation (such as a political party or other businesses). This challenges the claim to full discursive power of Big Techs.[230] While tech giants can shape discourse through their own activity on online platforms, they are not the only ones able to create or sway narratives. Still, without the existence of Big Tech 'infrastructure', everyone's discursive power would be more limited. As such it could still be said that Big Techs wield discursive power, since they are the one 'carrying' (or limiting)[231] others' discourse.

Artificial Intelligence itself is also likely to shape discursive power in coming years. This is due to the fact that we are moving away from entirely human-produced content to more AI-generated content.[232] This poses a significant concern. AI is also able to confidently assert outdated or fabricated facts, which can distort discourse by spreading misinformation.[233] Even more worrisome, AI can generate realistic but completely false videos and images of important figures such as politicians.[234] The saturation of online platforms with artificial 'truths' is a preview of how AI can and will be used to gain discursive power.

5. Conclusion: Limitations of the Modern Bigness conceptualisation

Modern Bigness is an interesting concept. As mentioned in the first chapter, Big Techs are part of so many different areas that it is difficult to map out the entire spread of their influence efficiently and comprehensively.

At the same time, it is a theoretical concept. 'Modern Bigness', while conceptually interesting, has yet to be introduced in practice. This means that there might be a difference between how it is envisaged in this chapter and the reality of the situation. Judges, lawyers, competition practitioners,

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[230] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

[231] Bill Baer and Caitlin Chin-Rothman, 'Addressing Big Tech's power over speech' (*Brookings,* 1 June 2021) <https://www.brookings.edu/articles/addressing-big-techs-power-over-speech/> accessed 11 March 2024.

[232] The Economist, 'AI-generated content is raising the value of trust' (*The Economist,* 18 January 2024) <https://www.economist.com/leaders/2024/01/18/ai-generated-content-is-raising-the-value-of-trust> accessed 04 June 2024.

[233] Katarina Kertysova, 'Artificial Intelligence and Disinformation How AI Changes the Way Disinformation is Produced, Disseminated, and Can Be Countered' [2019] Security and Human Rights 55.

[234] For example, the Center for Countering Digital Hate conducted tests on various popular AI image tools such as Midjourney and ChatGPT. Their findings revealed that these tools generated election disinformation in 41 % of instances, producing images that could potentially bolster false narratives regarding candidates or election fraud. The Center for Countering Digital Hate, *Fake Image Factories: How AI image generators threaten election integrity and democracy* (CCDH 2024).

in other words those who face 'Modern Bigness' in real life might have a more nuanced or contrary understanding to what I have presented in these sections. Still, taking this into consideration, there is reason to assume that the power of Big Techs is indeed not monistic. Rather, it is a composite (at least dualistic) form of power. This complexity challenges our traditional understanding of Bigness. It poses a problem for the suitability of competition law to be an answer to it. Competition law is traditionally conceived to provide a solution to Bigness (great market power) inasmuch as it threatens the consumer welfare standard.[235] However, the rise of Big Techs threatens the integrity of the political and social spheres. Authors such as Gerbrandy and Phoa suggest that competition law might need to broaden the scope of its aims.[236] In the following chapters I will explore how feasible this is in light of the AI Act.

[235] Kati Cseres, 'The Controversies of the Consumer Welfare Standard' [2006] Competition Law Review 121.

[236] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

Chapter 3: The EU AI Act's *in concreto* influence on competition law

1. Introduction

Modern Bigness is a different type of Bigness. As such it must be regulated differently. Existing laws[237] are often unprepared to respond to multifaceted types of power.[238] We have seen this in the case of Big Techs and how difficult it is to regulate their ever-growing influence. What makes the Act different from its predecessors, however, is its human-centric approach.[239] The Act clarifies that regulating and developing AI technology must be done in a human-centric way.[240] In doing so, it acknowledges that new technological power, especially if wielded by Big Techs, has both market as well as social and political ramifications.[241]

A human-centric approach when it comes to AI is not entirely new. It has most likely been borrowed by the Commission from the field of computer science.[242] While the definitions of human-centric AI (HCAI) vary within the literature,[243] it can generally be understood as:

(1) AI technologies that are improved because of human input[244] and

(2) AI technologies that are meant to 'amplify and augment rather than displace human abilities.'[245]

In other words, HCAI is meant to place humans at the centre of AI rather than have AI replace the human worker. Yet these definitions do not fully encapsulate what the EU vision for AI is. The computer science understanding of HCAI is relational. It is centred on improving the connection between humans and AI. It is also 'technical.' It plans on improving this relationship by creating a

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[237] Or even branches of law, in the case of competition law.

[238] See Chapter II of this work. This is not to say that there have been no regulatory efforts in this area. As mentioned in the introduction of thai thesis, the EU has been quite active in regards to (DSA, DMA, GDPR, Data Act), to name a few). What I am attempting to highlight is that Modern Bigness is of such a multifaceted nature that it is difficult to create a regulation that can fully respond to all of its ramifications.

[239] Unlike the AI Act, neither the DMA nor the DSA have a section dedicated to fundamental rights protection. Further, the AI Act explicitly mentions the need for a coordinated approach to human and ethical implications of AI. See also: European Commission, Building Trust in Human-Centric Artificial Intelligence, COM(2019) 168.

[240] EU AI Act, Recital 1.

[241] See Article 5 as well as Annex III of the EU AI Act and Chapter II of this work.

[242] For examples of this concept being used in computer science literature: Constance L Heitmeyer and others, 'Building High Assurance Human-Centric Decision Systems' [2014] Automated Software Engineering 159; Michael Laskey and others, 'Comparing human-centric and robot-centric sampling for robot deep learning from demonstrations' [2017] Institute of Electrical and Electronics Engineers 159; Xu Yuan and others, 'Coexistence Between Wi-Fi and LTE on Unlicensed Spectrum: A Human-Centric Approach' [2017] Institute of Electrical and Electronics Engineers Journal on Selected Areas in Communications 35.

[243] Stefan Schmager, Ilias Pappas and Polyxeni Vassilakopoulou, 'Defining Human-Centered AI: A Comprehensive Review of HCAI Literature' (15th Mediterranean Conference on Information Systems and the 6th Middle East & North Africa Conference on Digital Information Systems, Madrid, Spain, 5 September 2023) <https://www.researchgate.net/publication/373019807_Defining_Human-Centered_AI_A_Comprehensive_Review_of_HCAI_Literature> 17 April 2024.

[244] Akshay Kore, *Designing Human-Centric AI Experiences* (Springer 2022).

[245] Wener Geyer and others, 'What Is Human-Centered AI?' (*IBM Research Blog*, 3 August 2022) <https://research.ibm.com/blog/what-is-human-centered-ai> accessed 18 April 2024; See also: Ben Shneiderman, *Human-Centered AI* (Oxford University Press 2022).

computational infrastructure that benefits rather than harms humans.[246] The Commission's understanding of HCAI is also relational. But it is more 'legal' in nature. It achieves human-centeredness by integrating AI technologies within the framework of human rights law, European values and principles.[247] Human-centric AI is seen as necessary for achieving the overarching goals of the EU AI Strategy.[248] This strategy aims to boost European AI research, as well as attract investments into these technologies.[249] The end goal is for the Union to become a 'world-class hub for AI.'[250] At the same time, this status of an AI-leader must be achieved without sacrificing human rights, safety, or values.[251] To do so, we are told that AI has to be 'human-centric and trustworthy.'[252] Yet what this means is never defined in the AI Act. To understand how this concept is supposed to be interpreted, I turn to the official AI guidelines mandated by the Commission.[253] By doing so, I want to examine whether the AI Act's HCAI approach could have a 'trickle-down' effect in competition law.[254] This is based on the fact that the Act *will* influence the existing competition legal system. Some even see the Act as becoming an integral new pillar of EU competition law.[255] While it could be easy to dismiss this statement as speculative, the possibility of the AI Act to influence competition law has been acknowledged in the Act itself. In the Commission's draft version, the text initially read, 'The proposal is without prejudice to the application of Union competition law.'[256] However, in the final version of the Act, the reference of 'without prejudice to competition law' has been removed. Instead, the Act now reads as follows: '***The harmonised rules laid down in this Regulation should apply across sectors and, in line with the New Legislative Framework, should be without prejudice to existing Union law, in particular on data protection, consumer protection, fundamental rights, employment, and protection of workers, and product safety, to which this Regulation is complementary.***'[257] While competition law still falls under the umbrella term of 'Union law', the decision to no longer explicitly include it on this

[246]TU Delft, 'Human-Centred AI Systems' (*Technical University of Delft, 2024*) <https://www.tudelft.nl/en/ai/research-innovation/our-research-themes/responsible-design-and-engineering-of-human-centered-ai-and-data-driven-systems/human-centred-ai-systems> accessed 19 April 2024.

[247] European Commission, Innovation and Technology, *European Approach to Artificial Intelligence* (Shaping Europe's Digital Future, 2024).

[248] Ibid.

[249] Ibid.

[250] Ibid.

[251] Ibid.

[252] Ibid. See also: EU AI Act, Recital 8.

[253] Such as the *Ethics Guidelines for Trustworthy AI*.

[254] I borrow this term from the concept of 'trickle-down economics.' For more on the topic see Madeleine Burnette-McGrath, 'Reagan-Era Economic Theory in the Tax Cuts and Jobs Act: Trickle-down Economics through Increased International Mobility of Certain Corporate Income' [2019] Florida State University Business Review 57. Originally, it refers to the idea of investing in large corporations in order for that wealth to 'trickle-down' to disadvantaged economic classes. The parallel being made here is whether adopting a human-centric approach in AI 'trickles-down' (in other words: influences) to the aims of competition law.

[255] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts'(2023) Amsterdam Law & Technology Institute 10/2023.

[256] Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts Com/2021/206 Final, 4.

[257] EU AI Act, Recital 9. Emphasis original in the text.

list furthers the argument that the Act *will* likely have an impact on this area of law, although the exact nature and degree of this influence remains to be seen.

In this work I identify two potential types of influence that the Act could have on the field of competition law. First, there is what I call *in concreto influence* (influence in the concrete).[258] Second, there is *in abstracto influence* (influence in the abstract).[259] With *in concreto,* I refer to the more 'palpable' effects that the Act could have on competition.[260] With *in abstracto,* I refer to the impact that the Act could have on the more general aims of competition law.[261] The hypothesis I am exploring is whether such an impact translates into an influence on the goals of competition law as well. For example, if a human-centric approach leads to concrete impacts on competition law provisions, then does this translate into competition law adopting a more human-centric understanding of its goals as well, to ensure uniformity across the EU's legal landscape? Convergence of aims and approaches between the Act and the EU competition legal regime is not guaranteed. However, given the potentially far-reaching implications that the AI Act could have for competition (posited to become one of its 'future pillars'[262] as well as the fact that the Act itself does not state that it is without prejudice to competition law)[263] coupled with the evolving discourse on what the aims of competition law should be,[264] the question at least warrants asking.

Although the AI Act has yet to be fully implemented in the Member States,[265] it is sufficiently 'settled' text-wise to analyse its possible impacts. To conduct this analysis, I begin by first exploring how the concept of HCAI is outlined in the AI Ethics Guidelines.[266] I focus in particular on what criteria must be followed by an AI to be considered human-centric. I then look at how the HCAI concept is reflected within the provisions of the Act. I then examine the *in concreto* effects of the provisions on competition law. In doing so, I look at them from a Modern Bigness perspective - i.e. how they can be seen as a response to the Modern Bigness problem. I illustrate the tension that appears between trying to balance regulating Big Tech while at the same time taking into consideration business interests and efficient competition. This sets the background for the following chapter, which is dedicated to discussing how the provisions could change the aims of competition law.

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[258] Aaron X Fellmeth and Maurice Horwitz, *Guide to Latin in International Law* (Oxford University Press 2011).

[259] Ibid.

[260] Ibid. See later sections of this chapter for more.

[261] Ibid.

[262] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts'(2023) Amsterdam Law & Technology Institute 10/2023.

[263] See above.

[264] See Chapter II.

[265] The AI Act will probably fully come into force around 2026. European Commission, *Timeline - artificial intelligence.* Available at: https://www.consilium.europa.eu/en/policies/artificial-intelligence/timeline-artificial-intelligence (Accessed: 01 June 2024).

[266] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).

2. Human-Centric AI

In preparation for the EU AI Act's development and adoption, the Commission created a High-Level Expert Group on Artificial Intelligence (the AI HLEG).[267] This group was required to, among other tasks, create an AI Ethics Guidelines.[268] These guidelines shed light on the approach that the EU would like to take in regard to the AI Act. In these guidelines, it is understood that the EU has a commitment to use AI for the 'common good, with the goal of improving human welfare and freedom.'[269] This is an ambitious aim. At the same time, it is a rather general one. AI is seen as a possible solution to almost anything, ranging from the achievement of the UN's Sustainable Development Goals,[270] climate change, being a tool to minimise gender-based discrimination, to helping us make better use of natural resources and improve social cohesion.[271] Despite all of these potential pluses, there is the constant potential minus of AI worsening already existing issues. To try and stir the usage of AI for good purposes, the group argues that we must make AI that is **human-centred *and* trustworthy.**

The human-centric approach is one which guarantees humans a 'unique and inalienable moral status of primacy in the civil, political, economic and social fields.'[272] It ensures that human values are central to how AI systems are developed, used, and monitored. It does so by grounding AI systems in the fundamental rights framework.[273] Here, trustworthiness is not a synonym to human-centredness. Rather, it is a necessary component: the two go hand-in-hand. We see this in the language used in both the Act as well as other EU communications on the subject of AI. Whenever human-centric AI is mentioned, trustworthiness is always close by.[274] Why combine the two concepts? The idea behind this symbiosis is simple. The world is rapidly changing. To ensure societal progress, people must be able to trust the new technologies that come along.[275] The capacity of technology to push people into adopting a particular opinion or behaviour, as well as the capacity to influence discourse creates an imbalance in the human-technology relation.[276] This imbalance is accentuated by the black box nature of technologies, in particular AI. 'Black box' refers here to how technologies often lack transparency. For instance, it is hard to understand how and why an AI system makes its decisions or predictions. This causes people to be distrustful of AI and similarly

[267] European Commission, 'High-level expert group on artificial intelligence' (*Shaping Europe's digital future*, 19 April 2024)<https://digital-strategy.ec.europa.eu/en/policies/expert-group-ai> accessed 19 April 2024

[268] Ibid.

[269] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).

[270] UN, 'The 17 Goals for Sustainable Development' (*United Nations*) <https://sdgs.un.org/goals> accessed 22 April 2024.

[271] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).

[272] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019), 10.

[273] Including the fundamental rights set out in the Treaties of the European Union and Charter of Fundamental Rights of the European Union.

[274] See for instance EU AI Act Article 1 para 1 as well as Recital 27.

[275] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019). *Ethics Guidelines for Trustworthy AI*.

[276] See the previous Chapter.

opaque technologies. In this scenario, privately owned technology emerges then as the one in control. Humans take the second place - a source of data to be mined and manipulated. A human-centric approach challenges this imbalance, by having the individual use the technology rather than vice-versa. This more balanced, trustful relation with AI can only be achieved if the technology is well-regulated.[277] If it is subjected to strong laws, then people can use it with more confidence. Yet, trustworthiness is not just about having faith in a technology. Like a matryoshka doll, trustworthiness carries additional layers. According to the guidelines, AI should[278] fulfil the following criteria to be considered trustworthy:

'(1) It should be **lawful**, complying with all applicable laws and regulations

(2) It should be **ethical**, ensuring adherence to ethical principles and values

(3) It should be **robust**, both from a technical and social perspective since, even with good intentions, AI systems can cause unintentional harm'[279]

I would argue that these criteria are interrelated. Many European values and principles are codified in legislation. If an AI is lawful (for instance, it follows existing human rights laws), then it is most likely ethical.[280] 'Robustness' in the context of AI is synonymous with 'reliable.' Robust AI is predictable, transparent technology.[281] Robustness is important at a technical level - it ensures the AI system is reliable for its specific use. It is also important at a social level. We must consider the context and environment where the system is being used.[282] Robustness is further tied to the ethical element. AI must be based on a strong set of principles and values to avoid causing harm.[283] Thus, the three criteria are intertwined with one another. It is difficult to imagine an AI that is lawful without being ethical. Or ethical without being robust. We see this interconnection reflected throughout the Acts' provisions.[284]

When it comes to *in concreto* effects, the Act will likely influence the procedural powers of national competition authorities (NCAs), the assessment of AI-based practices, and further the development of 'computational antitrust.'[285] In this work, I focus on one of these possible effects, namely the

[277] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).
[278] The word choice of 'should' instead of 'must' suggests that the criteria are not mandatory or cumulative, but that ideally AI technologies would fulfil them.
[279] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019), 5. Emphasis original in the text.
[280] History has shown us repeatedly that not all laws are necessarily ethical (think for instance of the legal system within Nazi Germany or the concept of 'evil law' as a whole). However, I am of the opinion that the laws and principles of the EU can generally be seen as 'ethical.'
[281] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).
[282] Ibid.
[283] Ibid.
[284] See for example: Recitals 8, 22, 27, 133.
[285] I borrow this term, as well as the categorisation of possible *in concreto* effects, from the work of professor Thibault Schrepel. See Thibault Schrepel, Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

assessment of AI-based practices.[286] This work centres, as a whole, on the *in abstracto* dimension (the aims of competition law in relation to the AI Act). Nevertheless, it would be incomplete without discussing more 'concrete' impacts of the Act. After all, for the Act to influence the aims of competition law, it first needs to impact how competition law works.

3. In concreto influence of the AI Act on competition law: The Assessment of AI-based practices

3.1 Transparent AI and Big Techs

Human-centric AI is AI that is understandable.[287] If people have information about AI and can explain how it works, then their trust and control over the technology grows.[288] Access to more information can be seen as a possible solution to the black box nature of the technologies employed by Big Tech. If Big Techs are starting to create more 'public infrastructures', then it is natural to hold them to similar standards of openness as we do with Governments.[289] In other words, if we expect a degree of transparency from our Governments, we should also expect it from our Big Techs.[290] This promise of human-centric transparency is present in the Act's provisions. According to Article 12, providers of high-risk AI systems shall keep the logs automatically generated by their high-risk AI systems.[291] Article 13 of the AI Act also requires the logs, technical documentation, and instructions for use to be shared with deployers. This is essential for safety purposes.[292]

While this requirement for transparency is arguably 'ethical', 'robust', and 'lawful', the opposite could also be argued. In Article 12, a tension can be noticed between the safety of users and the secrecy of businesses. Secrecy is important and oftentimes necessary for new technologies.[293] For tech companies, secrecy is crucial in safeguarding their intellectual property rights while experimenting with product design and innovation.[294] The information contained in Article 13's 'logs' is of such sensitive nature that having it be shared could threaten this secrecy.[295] However it is this very secrecy that enables the companies to have power 'to scrutinize others while avoiding scrutiny oneself.'[296]

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[286] Mainly due to the word count limitations of this work as well as the scope (i.e. this thesis is not focused on Member State NCAs).

[287] The so-called principle of *explicability*. Further elaboration in the *Ethics Guidelines for Trustworthy AI*, 13.

[288] Gary Marcus and Ernest Davis, *Rebooting AI: Building Artificial Intelligence We Can Trust* (Pantheon Books 2019).

[289] See previous Chapter.

[290] Francis Fukuyama, Barak Richman and Ashish Goel, 'How to Save Democracy from Technology: Ending Big Tech's Information Monopoly' [2021] Foreign Affairs 98.

[291] EU AI Act, Article 12.

[292] EU AI Act, Article 13. See also Article 22. Safety here can be understood as protection from the dangers of high-risk AI systems.

[293] Jana Costas and Christopher Grey *Secrecy at work: The hidden architecture of organizations* (Stanford University Press 2016).

[294] Mikkel Flyverbom, *The Digital Prism: Transparency and Managed Visibilities in a Datafied World* (Cambridge University Press 2019).

[295] It could for instance facilitate the reverse-engineering of an AI system.

[296] Frank Pasquale, *The black box society. The secret algorithms that control money and information*. (Harvard University Press 2015), 3.

This lack of transparency, left unchallenged, becomes one of 'the most important forms of power' and has helped solidify Big Techs' dominance.[297] The more secretive and powerful a tech company grows, the more pressure it faces from civil society and policymakers to become transparent with how its systems operate.[298] How does the algorithm behind your favourite social media platform work? How does ChatGPT reach its answers? Whose artworks are being used as training materials to generate an image? Demanding access to information logs (normally part of the black box) can be an efficient means to gain more control over Big Tech. If you understand it, you can regulate it. If you regulate it, you can make it safer.

Prioritising safety is part of a possible response to Modern Bigness. Yet, choosing safety can lead to negative impacts on competition. Indeed, some have raised concerns that the emphasis of the Act on safety and transparency is at odds with evaluating anti-competitive practices. In particular, the risk of collusion.[299] Article 13 of the Act requires high-risk AI systems to be designed and developed to ensure their operation is transparent enough for users to interpret the system's output and utilise it properly. Besides the fact that Article 13 seems to a degree unrealistic (how do users interpret the output data without access to training data?)[300] it could also potentially allow companies with access to the logs to reverse-engineer the AI technology.[301] In this context collusion refers to sharing of commercially sensitive information, which is prohibited by Article 101 TFEU.[302]

However, the extent to which the data of the logs falls under the protection of Article 101 is debatable. The Guidelines on Article 101 indicate that information related to standards or health and safety issues is typically not considered commercially sensitive.[303] Further, one could argue that even if such information was covered by the Article, safety benefits outweigh possible competition issues.[304] The tension between safety and competition will most likely have to be solved by national agencies or the newly formed European Artificial Intelligence Office. This Office is tasked with helping the Commission and national authorities on emerging issues on the topic of AI and the AI Act. It will likely be the appropriate place to discuss the implications of the safety-competition debate.[305] It will need to deliberate whether the collusion-like behaviour facilitated by the Act is exempted from the scope of Article 101.

In summary, any company that will want to introduce an AI to the market will have to offer access to sensitive information about that technology. This may include details about how the AI system

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[297] Ibid.

[298] Warren J von Eschenbach, 'Transparency and the Black Box Problem: Why We Do Not Trust AI' [2021] Philosophy & Technology 1607.

[299] Thibault Schrepel, Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[300] Ibid.

[301] EU AI Act, Article 13.

[302] TFEU, Article 101.

[303] European Commission, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2023] C 259/01.

[304] Shin-Shin Hua and Haydn Belfield, 'AI & Antitrust: Reconciling Tensions between Competition Law and Cooperative AI Development' [2021] Yale Journal of Law & Technology 415.

[305] European Commission, 'European AI Office' (*Shaping Europe's digital future*). <https://digital-strategy.ec.europa.eu/en/policies/ai-office> accessed 19 April 2024 .

works - its ins and its outs. How it gathers information, how it was trained, how it generates new information. This leads to a risk of trade secrets being shared and creates incentives for collusive behaviour.[306] It also illustrates a recurring tension between trying to find an answer to Modern Bigness while not harming the existing framework of competition. Here, it is the safety of people contrasted with the secrecy (or one could even say safety) of companies, which could lead to (or at least maintain) good competition. A Neo-Brandeisian approach which prioritises social goals at odds with a Chicago focus on protecting competition. As we are about to see, this provision is not the only point of conflict - the tension between safety and competition becomes a recurring theme within the Act.

3.2 Impacts on the dynamics of competition

One of the Act's aims is to improve access to the single market. It does so by preventing the creation of a fragmented AI market. Instead of having all individual Member States take action on AI, there is only one-sided, Union action. This is a good strategy for tackling Modern Bigness. Having a singular legal 'front' is usually better in combating Big Tech-related issues. Ideally, it removes the dangers of unequal protection across the Member States. However, this prevention of regulatory fragmentation for AI could have an almost paradoxical effect. Instead of improving access to the single market, it could end up reducing it. There are two reasons behind this. First, it is difficult for the EU to uphold the Act's promise of 'technology neutrality.' Second, the AI Act places uneven burdens on companies.[307] The next section explores why these two aspects end up favouring Big Techs rather than curtailing their power.

3.2.1 Technology Neutrality

Is it better to have laws that are technology specific or technology neutral? This is a complex question. Legislators tend to favour technology neutrality.[308] We can see this in the case of the AI Act. In establishing the scope of the Act, the Commission sought to define AI in a way that is technology neutral.[309] This comes as a result of the Commission receiving multiple comments during the adoption of the Act which stressed the importance of having a neutral regulation.[310] Technology

[306] Ilgin Isgenc, 'Competition Law in the AI ERA: Algorithmic Collusion under EU Competition' [2021] Trinity Competition Law Review 35.

[307] Thibault Schrepel, Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[308] Which can be seen across multiple legal fields, from copyright to climate law. See for example: Brad A Greenberg, 'Rethinking Technology Neutrality' [2016] Minnesota Law Review 1495; Christian Azar and Björn A Sandén, 'The elusive quest for technology-neutral policies' [2011] Environmental Innovations and Societal Transitions 135.

[309] EU AI Act, Recital 119.

[310] Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts Com/2021/206 Final, 8. See also EU AI Act, Recital 119.

neutrality means having an approach that avoids discrimination against particular technologies.[311] As result, the Act cannot favour one type of AI over another.[312] This approach comes from the mantra of 'Governments are not good at picking winners; that should be left to the market.'[313] For Modern Bigness, technology neutrality is desirable, at least in theory. Technology neutrality makes sure that the Act will not feel 'antiquated' anytime soon.[314] It does so by ensuring that the Act is applicable to a broad range of AI rather than a specific type. For example, the Act targets all AI, not just generative AI.[315] This can be seen in the AI Act's categorisation of types of AI (AI with unacceptable, high, and limited risk), which remains sufficiently broad as to cover types of AI that are currently available as well as those that have yet to come.[316]

This broad approach can be better suited to tackling the challenges raised by AI. Unlike regulations, which take years to come to fruition, technologies such as AI evolve at a rapid pace. This leads to a time gap between corporate innovation and the lawmakers' response. Since technological developments are difficult to (accurately) predict, it becomes challenging to create laws that can regulate future tech efficiently.[317] For instance, when the AI Act was still being drafted, generative AI was not yet available on the market. Now it has become widely spread.[318] Given this speed of innovation, it is perhaps more pragmatic to have an Act with a more general scope of application.

Further, AI technology neutrality might be seen as a response to a worry voiced by Big companies. The concern is that the AI Act will lead to less innovation and 'jeopardise Europe's competitiveness and technological sovereignty.'[319] By ensuring that types of AI technologies will be regulated equally, this could convince companies thinking of quitting the European market to remain instead. However, it is also likely that the Act could fall somewhat short of this promise of neutrality.

While the Act aims to be broadly applicable and as such, uses a general classification model based on levels of risk (higher-risk versus lower-risk) rather than based on the specific types of AI,[320] some hold the view that this leads to discrimination.[321] By imposing restrictions on high(er)-risk AI, the Act favours overall the creation of safer and more predictable technologies at the expense of

[311] Thibault Schrepel, Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023. See also: Brad A Greenberg, 'Rethinking Technology Neutrality' [2016] Minnesota Law Review 1495.
[312] Ibid.
[313] Christian Azar and Björn A Sandén, 'The elusive quest for technology-neutral policies' [2011] Environmental Innovations and Societal Transitions 135,135.
[314] Ibid.
[315] EU AI Act, Recital 1.
[316] Ibid, See Recitals 31, 48, 53.
[317] Rowena Rodrigues, 'Legal and human rights issues of AI: Gaps, challenges and vulnerabilities' [2020] Journal of Responsible Technology 100005.
[318] The work on the Act began around 2021. ChatGPT was for example launched in 2022. OpenAI, 'Introducing ChatGPT' (OpenAI, 30 November 2022) <https://openai.com/index/chatgpt/> accessed 14 May 2024.
[319] The open letter criticising the AI Act can be found here.
[320] The Act does introduce the concept of a general-purpose AI, however general-purpose AI is still understood through the lenses of the risk classification. and is as such not a different classification system. See EU AI Act, Recital 112.
[321] See: Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

innovation.[322] This has even led to some AI businesses threatening to pull out of the EU market unless amendments to the Act are made. These 'threats' have proved successful. For instance, key AI player OpenAI (mother company of ChatGPT and DALL-E as well as Microsoft and Apple collaborator) successfully lobbied the EU to change certain provisions of the Act.[323] Initially, the Act contained restrictions such as a duty for providers of general-purpose AI to fully disclose the computing power required by the AI system, its training time, and other relevant information, as well as summaries of what copyrighted data was used for training.[324] An argument was that these requirements were not neutral because they affected general-purpose AI such as ChatGPT more than other types of non-high-risk AI. Making such information public amounted, according to OpenAI, to a business threat.[325] Further, OpenAI managed to prevent the initiative of the leading lawmakers of the AI Act, Brando Benifei and Dragoș Tudorache, to categorise AI systems such as ChatGPT, which are capable of producing complex texts without human supervision, as 'high-risk.'[326] The fact that OpenAI succeeded in doing so raises questions about how human-centric an approach to AI can actually be if it bends to Big Techs' will?[327]

3.2.2 Disproportionate regulatory burdens

Like many other regulations, the AI Act imposes burdens. These regulatory burdens are the new standards that companies must adhere to when it comes to creating and using AI. The issue, however, is that these burdens are not proportional. Both Big Techs and small techs will be held to the same standard. In doing so, the Commission assumes that all companies are equally prepared to achieve compliance. That is likely not the case. Company size and revenue plays a part when it comes to how well a company adheres to the Act. This was the case when the GDPR came into force. The GDPR applies the same rules to all companies, regardless of their user base size. Because of this, the GDPR ends up favouring larger companies.[328] Big companies are more likely to afford the costs of

[322] Ibid. This entails low and high randomness in AI.

[323] Billy Perrigo, 'Exclusive: OpenAI Lobbied the E.U. to Water Down AI Regulation' (*Time*, 20 June 2023) <https://time.com/6288245/openai-eu-lobbying-ai-act/> accessed 19 June 2024.

[324] Ibid; James Vincent, 'OpenAI says it could "cease operating" in the EU if it can't comply with future regulation' (*The Verge*, 25 May 2023) <https://www.theverge.com/2023/5/25/23737116/openai-ai-regulation-eu-ai-act-cease-operating> accessed 19 April 2024.

[325] Ibid.

[326]Gian Volpicelli, 'ChatGPT broke the EU plan to regulate AI' (*POLITICO*, 3 March 2023) <https://www.politico.eu/article/eu-plan-regulate-chatgpt-openai-artificial-intelligence-act/> accessed 19 June 2024.

[327] While OpenAI is not officially considered a Big Tech company, it does have influence in the AI field (and some could argue societal as well, given the popularity of products such as ChatGPT). Further, it does have a strong partnership with two of the Big Techs, namely Microsoft and Apple. See: Microsoft, 'Microsoft and OpenAI extend partnership' (*Microsoft Corporate Blogs*, 23 January 2023) <https://blogs.microsoft.com/blog/2023/01/23/microsoftandopenaiextendpartnership/ > accessed 22 April 2024; OpenAI, 'OpenAI and Apple announce partnership to integrate ChatGPT into Apple experiences' (*OpenAI*, 10 June 2024) < https://openai.com/index/openai-and-apple-announce-partnership/> accessed 21 June 2024.

[328] Garrett A Johnson, Scott K Shriver, and Samuel G Goldberg, 'Privacy and market concentration: intended and unintended consequences of the GDPR' [2023] Management Science 5695.

complying with the new rules without having too many financial sacrifices or fear of bankruptcy.[329] This stands in contrast with smaller companies that might have to cut funding that would otherwise be allocated to, for example, Research & Development in order to comply or just risk going out of business.[330] The Act appears to follow in the footsteps of the GDPR. The reason for this choice, according to the Commission, ties back to the safety versus secrecy and competition debate. The Commission argues that the dangerous nature of AI makes stringent requirements necessary. With stricter requirements fundamental rights and safety risks posed by AI are better mitigated. Since these risks are insufficiently addressed by existing legal frameworks, it is important for the Act to step in as the 'regulatory powerhouse.'

These stringent requirements are reflected in the Act's Article 11. This Article requires companies to create up-to-date documentation of high-risk AI systems before they are placed on the market.[331] The documentation must be created in such a way as to demonstrate that the AI technology is compliant with the Act's requirements. It must also provide national authorities with access to the necessary information to evaluate the AI system's compliance with those requirements.[332] The documentation should encompass details on the AI's interactions with external hardware or software, the use of third-party pre-trained systems or tools, and how the provider has used, integrated, or altered these components.[333] This documentation will most likely need to be done by someone with computer science expertise. However, the documentation is not just about the inner workings of an AI. It must also contain the data needed to determine whether the operation of the AI system adheres to the fundamental rights outlined in the Act.[334] This means that a legal expert is also needed. The legal expert would ensure that the information is sufficiently detailed to evaluate compliance with fundamental rights.[335] So how come the Commission did not take into consideration the additional financial burdens that the Act might cause? This could be due to a mis-assessment of how many smaller companies, such as start-ups, use AI. In the impact assessment of the Act it was assumed that between 5 – 15 % of European start-ups use AI technologies that are high-risk and would as such be strongly affected by the Act.[336] Given the low numbers, a GDPR-esque approach was considered suitable. However, a recent survey found that the number is closer to 33 - 50 % of start-ups.[337] If accurate, this estimation raises concerns about the disproportionate

[329] Some research shows that when it comes to GDPR compliance, 88 % of companies spend more than $ 1 million and 40 % spend more than $ 10 million. Luke Irwin, 'How Much Does GDPR Compliance Cost in 2023?' (*IT Governance*, 10 May 2023) <https://www.itgovernance.eu/blog/en/how-much-does-gdpr-compliance-cost-in-2020> accessed 22 April 2024.

[330] Chinchih Chen and others, 'Privacy regulation and firm performance: Estimating the GDPR effect globally' (2022) The Oxford Martin Working Paper Series on Technological and Economic Change no. 2022-1.

[331] EU AI Act, Article 11.

[332] Ibid.

[333] Ibid.

[334] For example, Recital 48 addresses the right to freedom of expression, Recital 32 the freedom of assembly, and Recital 25 freedom of science.

[335] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[336] European Commission, Impact Assessment Accompanying the Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts (COM 206, 2021), 68.

[337] Andreas Liebl and Till Klein, *AI Act Impact Surv*ey (Initiative for Applied Artificial Intelligence 2022). The discrepancy could also be due to the fact that many companies/startups appear to mislabel their services as AI (the so-called phenomenon of 'AI-washing', i.e. 'relabeling solutions that use simple statistical models as AI systems'). See

effects of the AI Act. While it is true that Modern Bigness and its high-risk technologies must be regulated, this should ideally not be achieved by sacrificing the future of smaller companies. At the same time, the fear remains that all breaches of safety, whether by Big Techs or small techs, are sufficiently worrisome to warrant equally strict regulation.

To summarise, preparing the documentation mandated by Article 11 of the AI Act will likely require at least two employees. One will have the technical know-how, and another one will have legal expertise. Depending on the workload and amount of information, even more staff might need to be employed.[338] It is hard to imagine how a small start-up or company could afford to hire multiple experts. At least not without sacrificing other expenses and falling behind competitors. The AI Act seems to tilt the playing field in favour of bigger companies that can comply without sacrificing their budget for innovation. This attempt at regulating Modern Bigness could in fact harm smaller companies while favouring Big Techs. The lack of proportionality of the regulatory burdens could worsen the already declining number of start-ups[339] and the AI-leader image that EU wanted to build.[340]

3.2.3 Access to the single market

The AI Act is a nuanced regulatory framework. Its effects on the internal single market are not entirely predictable. A possible unexpected impact could be restricted access to the single market.[341] Article 5 (1) subparagraph a of the AI Act prohibits 'the placing on the market, the putting into service or the use of an AI system that deploys subliminal techniques beyond a person's consciousness ***or purposefully manipulative or deceptive techniques, with the objective, or the effect of*** materially ***distorting*** the behaviour of a person ***or a group of persons by appreciably impairing their ability to make an informed decision, thereby causing them to take a decision that they would not have otherwise taken*** in a manner that causes or is ***reasonably*** likely to cause that person***,*** another person ***or group of persons significant*** harm.'[342] Article 5 could, depending on how it is interpreted, prohibit segments of AI-based advertising in Europe, which could lead to litigation. Further, some of the rules concerning high-risk AI systems, although well-meaning, might be challenging to adhere to. For instance, the Act mentions that datasets should be 'relevant, sufficiently representative, and to the best extent possible, free of errors and complete in view of the intended purpose.'[343] The consensus among data and computer

Dirk Leffrang and Oliver Mueller, 'AI washing: The framing effect of labels on algorithmic advice utilization' (International conference on information Systems, Hyderabad, 12 December 2023) <https://aisel.aisnet.org/icis2023/> 14 May 2024.

[338] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[339] See section 4.1 of Chapter II.

[340] European Commission, Innovation and Technology, *European Approach to Artificial Intelligence* (Shaping Europe's Digital Future, 2024).

[341] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[342] EU AI Act, Article 5 para 1, subpara a. Emphasis not my own, but original in the Act's text.

[343] EU AI Act, Article 10 para 3.

scientists is however that such an objective is generally not achievable.[344] Some datasets used to train AI models contain trillions of entries, making it impossible for companies to manually check them all for compliance with the Act. Even attempting to do so would be prohibitively expensive and time-consuming.[345] Further, the article's unclear terms ('sufficiently representative,' 'appropriate,' 'to the best extent possible')[346] are likely to lead to litigation. The possibility of such legal disputes might reduce the motivation of companies to participate in the EU single market.[347]

Second, many of the requirements outlined in the AI Act are expensive to meet. This is because, when weighing the trade-offs between competition and other goals, the AI Act frequently prioritises these other objectives over competition. For instance, regarding safety and competition, Recital 73 of the AI Act indicates the Commission's aim is to compel the design of high-risk systems so that individuals can oversee their operation.[348] Article 9 states that 'a risk management system shall be established, implemented, documented, and maintained concerning high-risk AI systems.'[349] This must be done 'throughout the entire lifecycle of the AI system.'[350] Establishing and implementing such risk management systems will indeed incur costs. Favouring protection from high(er)-risk AI could lead some companies to have a lessened incentive to enter the single market. However, it is difficult to pinpoint the exact impact that such a decision will have on the single market, given that there are many types of AI systems that would fall outside of the scope of high-risk AI and that are less likely to be affected by these provisions. This prioritisation of risk management extends to Articles 14 and 15 of the AI Act. The former requires human oversight[351], while the latter requires providers to design high-risk AI systems to achieve an appropriate level of 'accuracy, robustness, and cybersecurity'[352] consistently throughout their lifecycle.[353] The Parliament opted to describe high-risk systems following the principle of protection of data by 'design and by default.'[354] These articles reflect the preference of both the Commission and the Parliament for prioritising safety over competition.

When considering the balance between transparency and competition, Article 12 of the European Commission's AI Act requires that 'High-risk AI systems shall technically allow for the automatic recording of events (logs) over the lifetime of the system.'[355] Similarly, Article 13 requires high-risk AI systems to be designed and developed to ensure their operation is transparent enough for users to interpret the system's output and use it properly. Aside from the fact that Article 13 seems

[344] Danah Boyd and Kate Crawford, 'Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon' [2012] Information Communication & Society 662.
[345] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.
[346] EU AI Act, Article 10.
[347] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.
[348] EU AI Act, Recital 73.
[349] EU AI Act, Article 9 para 1.
[350] EU AI Act, Article 9 para 2.
[351] EU AI Act, Article 14.
[352] EU AI Act, Recital 74.
[353] EU AI Act, Article 15.
[354] EU AI Act, Recital 69.
[355] EU AI Act, Article 12 para 1.

unrealistic - how could users 'interpret' the system's output without access to the training data? - it could, as previously mentioned, potentially enable reverse engineering by the companies that possess the logs.[356] Transparency is therefore favoured over competition. For targeting Big Techs, this might be the correct approach. At the same time, it could make access to the EU single market more difficult.

3.2.4 Regulatory capture

The ability of the Act to efficiently pave the way for human-centric and trustworthy AI relies on how well AI providers comply with it. There are two ways to achieve this compliance.

First, companies can follow the standards set by the European Standardisation Organisations (ESOs). Standardisation enables the development of technical or quality specifications for existing or future products and services.[357] As a result, it provides advantages for both research and industry by facilitating coordination. Regulators rely on standards to gather expert knowledge and tackle risks, especially in safety regulations.[358] They utilise standards to encourage the adoption of legal obligations and ethical principles. The most relevant standard-setting organisations for the AI Act are the CEN (European Committee for Standardisation) and the CENELEC (European Committee for Electrotechnical Standardisation),[359] with the ETSI (European Telecommunications Standards Institute) playing a more minor role.[360] These standards will most likely address risks that AI poses to fundamental rights. However, we will only see the exact text of these standards in 2025.[361] As such it is too early to speculate on or analyse how companies, in particular Big Techs, could react to them.[362] Still, it can be said that adhering to the ESO standards on AI (whatever they will be) is perhaps the easiest way for a company to demonstrate compliance with the AI Act.

Another option is self-assessment. Companies can assess on their own how well they comply with the AI Act.[363] Yet even this choice was not without the influence of ESO standards. Initially, Article 9 of the Act clearly noted that for self-assessments, corporations should still consult the established

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[356] EU AI Act, Article 13. See also: Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[357] Johann Laux, Sandra Wachter and Brent Mittelstadt, 'Three pathways for standardisation and ethical disclosure by default under the European Union Artificial Intelligence Act' [2024] Computer Law & Security Review 105957.

[358] Fabiana Di Porto and Marialuisa Zuppetta, 'Co-regulating algorithmic disclosure for digital platforms' [2020] Policy and Society 272.

[359] CEN-CENELEC, 'CEN/CLC/JTC 21 Work programme' (CEN/CLC/JTC 21) <https://standards.cencenelec.eu/dyn/www/f?p=205:22:0:::FSP_ORG_ID,FSP_LANG_ID:2916257,25&cs=1827B89DA69577BF3631EE2B6070F207D> accessed April 23, 2024.

[360] Hadrian Pouget , 'Standard Setting' (*EU Artificial Intelligence Act*) <https://artificialintelligenceact.eu/standard-setting/> accessed April 23, 2024.

[361] Ibid.

[362] European Commission, 'Standard Setting' (*EU Artificial Intelligence Act*) <https://artificialintelligenceact.eu/standard-setting/> accessed 19 April 2024.

[363] EU AI Act, Article 43 para 1 mentions an 'internal conformity assessment', which can be understood as a form of self-assessment. See also Annex VII of the Act on how this procedure should be carried out.

standards.[364] The Parliament however opted for a revised version that no longer references these standards.[365] Even so, this change might have little effect in reality. The majority of companies will likely continue to rely on following existing standards instead of self-assessment.[366] Relying on standards is less expensive and provides more legal certainty.[367] Self-assessment in comparison is a more complex process. The self-assessments require approval by a 'notified body'[368] and would have to meet the conditions outlined in Article 43 of the AI Act.[369] Nevertheless, following standards over self-assessment does carry some disadvantages. The main downside is that it leads to ESOs playing a perhaps too important of a role in how the AI Act is enforced. The Act's sometimes vague provisions leave the door open for ESOs to decide what the acceptable levels of risks to fundamental rights are.[370] This could lead to a 'regulatory capture'[371] of sorts, with ESOs taking the lead over institutions such as the EU AI Office or relevant national authorities. Further, ESOs have faced criticism for their lack of transparency and of a 'democratic' process.[372] How ESOs create their standards remains an opaque process. These organisations are meant to represent the interests of other parties. In this case - small and medium-sized enterprises (SMEs), consumers, and trade unions.[373] Regulation 1025/2012[374] acknowledges that EU-wide standards are crucial for the competitiveness of SMEs.[375] However, SMEs, consumers, and trade unions themselves are most often not deeply involved in the standardisation process. Neither is the public at large.[376] Article 40 of the Act could be revised to make the validity of harmonised standards contingent on European standardisation organisations

[364] Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts Com/2021/206 Final, Article 9 subpara 3: corporations would have to 'take into account the generally acknowledged state of the art, including as reflected in relevant harmonised standards or common specifications.' See also: Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[365] EU AI Act, Article 9.

[366] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

[367] Sybe de Vries, Olia Kanevskaia and Rik de Jager, 'Internal Market 3.0: The Old "New Approach" for Harmonising AI Regulation' [2023] European Papers 583.

[368] The notified bodies are independent organs set up by each Member State that determine whether the tested system meets the requirements of the AI Act based on the technical documentation provided. See Articles 33 and 43 of the EU AI Act.

[369] EU AI Act, Article 43. Article 43 details the conformity assessment procedure for providers of high-risk AI.

[370] Instead of a national agency or the EU AI Office, which could be perhaps better suited to assess this.

[371] Regulatory capture refers to prioritising a special interest over the general interests of the public. Ernesto Dal Bó, 'Regulatory Capture: A Review' [2006] Oxford Review of Economic Policy 22.

[372] Johann Laux, Sandra Wachter and Brent Mittelstadt, 'Three pathways for standardisation and ethical disclosure by default under the European Union Artificial Intelligence Act' [2024] Computer Law & Security Review 105957.

[373] Ibid. See also: Alicia Solow-Niederman, 'Can AI Standards Have Politics?' [2023] UCLA Law Review 71.

[374] Regulation 1025/2012 of 14 November 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council [2012] OJ L 316.

[375] Ibid.

[376] Ibid. Although Recital 17 of Regulation 1025/2012 requires that SMEs, consumer organisations, and environmental and social stakeholders are appropriately represented and can participate in European standardisation activities, that representation is oftentimes insufficient.

having at least one-third of their seats held by SMEs when adopting standards related to the AI Act.[377]

The questionable democratic legitimacy of the standardisation process is relevant for the efficiency of the Act. The Act's HCAI approach makes the Act a rather normative document. At this stage, it remains uncertain to what extent CEN and CENELEC will tackle the complex normative issues that the implementation of AI systems in private and public organisations inevitably brings. Preventing human fatalities for example is an easily agreeable normative aim. Addressing more intricate normative challenges (for instance minimising gender or racial biases inherent in the training data) will undoubtedly be much more challenging to navigate.[378] Answering normative questions involves endorsing particular interpretations or theoretical approaches for normative concepts (like equality, transparency, or dignity), or defining acceptable or preferred compromises between conflicting interests.[379] Given the sensitive nature of these concepts, the lack of experts from groups such as AI HLEG or from the HCAI field is concerning.

3.3 The difficulty in adapting the Act

Many times, criticism of Big Tech regulations revolves around one word: *inflexible*. Technology evolves at a faster pace than regulators can keep up with. And the existing laws are too rigid to be successfully amended.[380] The AI Act seems to have learned from this. Its language hints at flexibility. Besides the technology neutral approach,[381] we see promising mentions of the Act being future-proof.[382] Yet despite the promising language, the latest changes brought about by the Parliament during the drafting process have left the Act with a rigid structure.[383]

Initially, the AI Act granted the Commission the power to modify the definition of an AI system.[384] This flexibility could have been useful - after all the definition of AI remains a debated topic.[385] However, the European Parliament removed this provision entirely.[386] Additionally, Article 7 of the AI Act empowered the Commission to change the Act by updating what can be understood as high-

[377] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.
[378] Johann Laux, Sandra Wachter and Brent Mittelstadt, 'Three pathways for standardisation and ethical disclosure by default under the European Union Artificial Intelligence Act' [2024] Computer Law & Security Review 105957.
[379] Ibid.
[380] Ian Brown and Christopher T Marsden, *Regulating Code: Good Governance and Better Regulation in the Information Age* (MIT 2013).
[381] Which favours future applicability. See the previous section.
[382] EU AI Act, Recital 138.
[383] Human Rights Watch, *How the EU's Flawed Artificial Intelligence Regulation Endangers the Social Safety Net* (HRW 2021).
[384] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.
[385] Andrew Lea, 'Why Is Ai Hard to Define?' (*The Chartered Institute for AI*) <https://www.bcs.org/articles-opinion-and-research/why-is-ai-hard-to-define/> accessed 19 April 2024.
[386] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts' (2023) Amsterdam Law & Technology Institute 10/2023.

risk AI systems.[387] The European Parliament limited this power. Now if an AI application emerges as dangerous in the future, the law does not provide mechanisms to immediately label it as 'high-risk.'[388]

Can a Member State create its own regulations to compensate for these potential deficiencies? Generally, the answer is clear: no. The Act provides a single set of guidelines for the development, marketing, and use of AI systems. Member States are prohibited from implementing their own rules unless specifically permitted by the Regulation.[389] If a Member State requires companies that make AI profiling software to disclose which government agencies they are doing business with, the providers could oppose this mandate. They can argue that since it is not explicitly stated in the AI Act then the Member State is not empowered to act. Even if Member States tried to overrule the Act and set their own rules to protect rights, the European Court of Justice has established strict criteria for such claims.[390] This rigid design makes it even more crucial for the EU to ensure that the regulation includes strong protections.[391] The human-centric and trustworthy language of the Act is insufficient if it does not guarantee efficient protection.

Essentially, the AI Act is flexible to a point. It shows some flexibility in defining AI, categorising high-risk AI systems, and deciding which regulations apply to non-high-risk AI systems. But the rules about which AI systems are banned and the requirements for high-risk systems remain strict. If these rules do not work as intended or they slow down innovation, European institutions do not have much room to change the AI Act. This could make the Act less effective when it comes to counteracting Big Techs.

4. The beat of a different drum: HCAI at odds with competition law

Safety above all - this seems to be the tenet of the AI Act. Safety above secrecy, above competition, and corporate interests. The focus on safety comes not only from the mention of fundamental rights. After all, many technology regulations highlight a commitment to respecting such rights. The Act is unique because it engages more with fundamental rights compared to other EU regulations. Several key requirements for high-risk AI systems are based on fundamental rights. For instance, there is a need to specify situations where using the AI system might pose risks, or to create appropriate mechanisms for human supervision of the AI system.[392] Evaluating compliance involves assessing how effectively an AI system removes risks to fundamental rights. These rights are not just an add-on to the AI Act. They are its foundation.[393] Prioritising safety to a higher degree is the direct

[387] Ibid.

[388] Ibid. See also: Philipp Hacker,'The European AI liability directives - Critique of a half-hearted approach and lessons for the future' [2023] Computer Law & Security Review 105871.

[389] EU AI Act, Recital 1.

[390] See for more: Michael Veale and Frederik Borgesius Zuiderveen,'Demystifying the Draft EU Artificial Intelligence Act' [2021] Computer Law Review International 112.

[391] Human Rights Watch, *How the EU's Flawed Artificial Intelligence Regulation Endangers the Social Safety Net* (HRW 2021).

[392] See for example Article 5 and 14 of the EU AI Act.

[393] Marco Almada and Nicolas Petit, 'The EU AI Act: A Medley of Product Safety and Fundamental Rights?' (2023) EUI Robert Schuman Centre for Advanced Studies Research Paper 2023/59.

result of the Act's human-centric philosophy. It is also seen as a means of tackling some of the problems caused by Modern Bigness. It challenges the idea that companies enjoy full rights of secrecy or benefit from preferential treatment based on user base size if this enjoyment comes at the expense of human safety and fundamental rights. It places as such the interests of people over competition or corporate interests. Some could say, this even places safety above innovation. This human-centric approach forms the backbone of the AI Act's criticism. This criticism has come primarily from companies who argue that such measures will lead to a decrease in innovation.[394]

At the same time, if we set the criticism aside, some of these provisions might still end up favouring already powerful Big Techs at the expense of smaller companies or start-ups. It is the Bigger companies that have either already shaped some of its provisions[395] in their favour or are likely to better adapt to the Act. This casts doubt over their overall efficiency vis-à-vis Modern Bigness. Even if Big Techs comply with the provisions, that might still not be a full answer to the problems of Modern Bigness. Instead, the Act might lead to a repeat of the GDPR's weaker points. Think of cookie banners and how they lead a user to consenting to thousands of affiliates without truly understanding it.[396] Those outcomes were likely not what the GDPR aimed for. Similar unintended consequences could be on the horizon for the AI Act. Weaponised AI explanations, superficial certifications, or pushing the responsibility of liability onto users are just some examples of potential problems that could arise and undermine the effectiveness of the AI Act.[397]

Not only does the Act just partially solve Modern Bigness-related issues, but some of its existing provisions find themselves in conflict with the current competition law system. Either the Act challenges key competition laws[398] or it makes competition more difficult, especially for start-ups and SMEs. The question is then whether the Act will, shortcomings included, be able to push for new aims within European competition law. The Act appears to be at odds with (some of the existing) competition laws and with the dominant Post-Chicago and Ordoliberal approaches. At the same time the Act is likely to become a 'pillar' of competition law. Does this mean that the human-centric approach will then be implanted into competition law? Are we posed as a result to see an embrace of Neo-Brandeisianism in the EU akin to the one in the US? The next chapter will explore this possibility in fuller detail.

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[394] See for example: Tom Foster, 'Big Tech execs say Europe's new AI law could harm innovation' (*CNN*, 24 May 2024) <https://edition.cnn.com/2024/05/24/tech/meta-amazon-ai-fears-eu-law/index.html> accessed 04 June 2024.

[395] See the previous section's example of ChatGPT lessening some of the stricter restrictions placed on generative AI.

[396] André Calero Valdez and others, 'The European Commitment to Human-Centered Technology: The Integral Role of HCI in the EU AI Act's Success' [2024] University of Lübeck, Tim Schrills Institute of Multimedia and Interactive Systems (Preprint) 23562. See also on this topic: Irene Pollach, 'A Typology of Communicative Strategies in Online Privacy Policies: Ethics, Power and Informed Consent' [2005] Journal of Business Ethics 221.

[397] André Calero Valdez and others, 'The European Commitment to Human-Centered Technology: The Integral Role of HCI in the EU AI Act's Success' [2024] University of Lübeck, Tim Schrills Institute of Multimedia and Interactive Systems (Preprint) 23562.

[398] See section 3.1 regarding Article 101 TFEU.

Chapter 4: The EU AI Act's *in abstracto* influence on competition law

1. Introduction

Power is a complex concept that can be interpreted in many different ways. Oftentimes, how we understand power depends on the approach that we take. Under the Modern Bigness perspective, power extends beyond just financial or market dominance.[399] Big Tech companies have demonstrated that power can encompass multiple factors, including technological influence, but also social and political impact.[400] Following the Modern Bigness paradigm, we are then faced with the following question: how do we respond to the multifaceted effects of Bigness? The AI Act offers a possible answer: by choosing a human-centric approach.[401] Place the human being at the centre of the AI regulatory process.[402] Let human rights have primacy, even if it comes at the risk of less innovation. Safety should outweigh corporate interests. Business secrecy comes secondary to the right of people to be protected from high-risk AI technologies. The protection and advancement of the human being should be prioritised, even if it could harm competition.[403] This leads to another question, this time of integration. How well do the Act's provisions fit within the existing competition law system? In the previous chapter I outlined some points of tension. In *concreto* a human-centric approach appears to, among others, clash with Article 101 TFEU. Namely, there is a possible conflict between the duty of transparency for companies (Article 13 of the AI Act) and a prohibition of sharing commercially sensitive information (Article 101 TFEU).[404] In *abstracto*, however, the influence of the Act on competition law is more difficult to analyse. To begin with, it could be challenging for the AI Act to have a genuine impact on the aims of competition law. This is partly due to the potential incompatibilities between the Act's human-centric approach and EU competition law's use of the consumer welfare standard. It is true that the aims of competition law are still being debated.[405] However, the dominant position in EU competition law remains that the focus should be on protecting consumer welfare.[406] The Act's human-centric ambitions are closer instead to the Neo-Brandeisian way of thinking, which considers non-economic interests to be relevant to competition.[407] This leads to uncertainty about how the relation between the Act and competition law will develop. Will the Act be able to coexist with the competition legal system while avoiding potential tensions? Or will competition law have to adjust its aims to fall more in line with the HCAI approach? The extent to which the Act could shape the objectives of competition law could depend on how 'flexible' the consumer welfare standard proves to be. 'Flexibility' in this

[399] See Chapters II and III of this work.

[400] Anna Gerbrandy and Pauline Phoa, 'The Power of Big Tech Corporations as Modern Bigness and a Vocabulary for Shaping Competition Law as Counter-Power' in Michael Bennett, Huub Brouwer, and Rutger Claassen (eds), *Wealth and Power* (Routledge 2022).

[401] EU AI Act, Recital 1.

[402] European Commission, Building Trust in Human-Centric Artificial Intelligence, COM(2019).

[403] See previous Chapter.

[404] See Chapter III section 3.1.

[405] As shown in Chapter II, there are multiple perspectives present when discussing the aims of competition law.

[406] Since it is the perspective endorsed by the Commission. See European Commission, 'Competition: What the Commission is doing' (European Commission) <https://commission.europa.eu/topics/competition_en> accessed 14 May 2024.

[407] Timothy Wu, *The Curse of Bigness: Antitrust in the New Gilded Age* (Columbia Global Reports 2018).

context refers to how likely the standard is to include non-economic aims. Whether the 'trickle-down' of the Act on competition law aims happens depends on whether we operate with a narrow, broad or, to borrow from Gerbrandy and Claassen, an 'inclusive' consumer welfare standard.[408] While the Act itself is not a *bona fide* human rights legislation (it is in fact closer to being a product safety regulation[409]) it does have a strong focus on such rights.[410] Whether the AI Act impacts the aims of competition law is then reliant on whether concerns about non-economic values (e.g. rights such as safety or privacy) are considered when analysing harm to consumer welfare.

These reflections guide the structure of the chapter. I begin by discussing the consumer welfare standard. This differs however from the approach taken in Chapter II. I am not conducting a legal-historical analysis to see how the aims of competition law and the consumer welfare standard have evolved. Instead, I look at how the type of consumer welfare standard used influences the kind of integration that occurs between the Act and competition law. In doing so I briefly discuss different approaches to consumer welfare (narrow, broad, inclusive). Then, I use a framework proposed by Professor Julian Nowag which distinguishes between different types of legal integration.[411] Nowag's framework was initially developed to analyse the potential incompatibilities between EU competition law and sustainability policies.[412] However, this framework could also be applied to other types of laws/policies that could have a contentious relation with competition law, such as the AI Act. Based on his theory of integration I propose two scenarios for how the AI Act-competition law relation could play out. For my third scenario, I look beyond this framework and draw inspiration from the GDPR-competition law connection. Relevant here is the judgement of *Meta v Bundeskartellamt.*[413] Based on this judgement I hypothesise on how a similar development could look like for the AI Act and competition law. Nonetheless, the aim of these scenarios is not to convince the reader that one is superior to the other. Rather, it is to show that how integration takes place and therefore how (or if) the Act counterbalances Modern Bigness depends on how we think about competition law and consumer welfare.

2. On potential criticism

Before delving into this analysis further, I would like to first address a possible criticism. Some argue that debating the goals of competition law is largely an academic exercise. Therefore, it has little relevance for the actual enforcement of competition law.[414] However, I would argue that the opposite is true. How competition laws are enforced depends on what their underlying goal(s) are

[408] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[409] Marco Almada and Nicolas Petit, 'The EU AI Act: A Medley of Product Safety and Fundamental Rights?' (2023) EUI Robert Schuman Centre for Advanced Studies Research Paper 2023/59.

[410] Ibid. See also: Chapter III of this work.

[411] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.

[412] Ibid.

[413] Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21)[2023] ECLI:EU:C:2023:537.

[414] Konstantinos Stylianou and Marios Iacovides, 'The goals of EU competition law: a comprehensive empirical investigation' [2022] Legal Studies 620.

perceived to be.[415] Over time, various interpretations of competition law have assigned diverse and occasionally conflicting objectives to it.[416] Protecting consumer welfare.[417] Increasing efficiency.[418] Safeguarding competition.[419] Promoting EU integration.[420] The list goes on. Changing the emphasis from one of these goals to another can affect not just the outcome of competition enforcement, but more significantly, whether the enforcement mechanism is activated to begin with.[421] As encapsulated by judge Robert Bork: 'antitrust policy cannot be made rational until we are able to give a firm answer to one question: What is the point of the law – what are its goals? Everything else follows from the answer we give.'[422]

3. Consumer welfare: different perspectives

3.1 The narrow consumer welfare standard

Competition is essential for a well-functioning market economy. At the same time, there is no consensus on what the exact objectives of competition law are or should be.[423] According to the case law of the EU Courts, one of the main functions of competition law is preventing 'consumer harm.'[424] The European Commission has interpreted this to mean that the core goal of competition law is to protect consumers.[425] Still, what the Commission understands by 'protecting consumers' is not always straightforward.[426] Take for example the Commission Guidance on Enforcement Priorities in Applying Article 102 TFEU to Abusive Exclusionary Conduct by Dominant Undertakings.[427] Here the concept of 'consumer harm' is broadly defined. It refers to *all* practices that can restrict competition. Such practices are, for instance, diminished innovation, higher prices, and lessened consumer choice.[428] Because of this rather open definition, the Commission's approach

[415] Eva Lachnit, 'Alternative Enforcement of Competition Law' (PhD thesis, University of Utrecht 2016).

[416] See Chapter II for more on this.

[417] Gregory J Werden, 'Consumer Welfare and Competition Policy' in Josef Drexl, Wolfgang Kerber, and Rupprecht Podszun (eds), *Competition Policy and the Economic Approach* (Edward Elgar 2011).

[418] Wolfgang Kerber, 'Should Competition Law Promote Efficiency? Some Reflections of an Economist on the Normative Foundations of Competition Law' in Josef Drexl, Laurence Idot, and Joël Monéger (eds), *Economic Theory and Competition Law* (Edward Elgar 2009).

[419] Marshall Steinbaum, Maurice E. Stucke, 'The Effective Competition Standard: A New Standard for Antitrust' [2020] The University of Chicago Law Review 595.

[420] Milène Wegmann, 'European Competition Law: Catalyst of Integration and Convergence' in Kaarlo Tuori (editor), *The Many Constitutions of Europe* (Routledge 2010).

[421] Konstantinos Stylianou and Marios Iacovides, 'The goals of EU competition law: a comprehensive empirical investigation' [2022] Legal Studies 620.

[422] Robert H Bork, *The Antitrust Paradox* (Free Press 1978), 50.

[423] Giorgio Monti, *EC Competition Law* (Cambridge University Press 2007).

[424] See Chapter II section 3.2 of this work.

[425] Still, the Court of Justice of the EU has never explicitly endorsed the concept of consumer welfare.

[426] Ioannis Lianos, 'Some Reflections on the Question of the Goals of EU Competition Law' (2013) UCL Centre for Law, Economics and Society Research Paper Series 3/2013.

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

[428] Eleanor M Fox, 'What is Harm to Competition - Exclusionary Practices and Anticompetitive Effect' [2002] Antitrust Law Journal 371.

has been deemed by some to be 'impressionistic.'[429] It focuses on a general aim of protecting consumers by removing restrictions on competition.[430] But it remains unclear whether this is the only aim or if additional aims are possible. To further complicate matters, consumer protection is often described using different, seemingly interchangeable labels. Sometimes we see this goal described as preventing 'consumer harm.'[431] Other times it is phrased as preventing detriment to consumers.[432] Many times this form of consumer protection from anticompetitive behaviour is labelled 'consumer welfare.'[433] Yet, there is no definition of what 'consumer welfare' actually entails.[434] How far the consumer welfare concept stretches, whether it can include non-economic values, or how it differs from notions such as consumer choice or consumer surplus become subject of speculation.[435] Despite these uncertainties, consumer welfare is usually assessed using economic efficiency metrics.[436] This is called a 'narrow' approach to consumer welfare.[437] Legal practitioners and economists look at corporate agreements and assess how they could lead to gains or losses to consumer welfare.[438] These gains and losses are then measured in monetary terms. If the drawbacks to consumers surpass the advantages, the agreement is then deemed to have transgressed competition law.[439] Under this narrow approach agreements between companies that result in higher prices, reduced output or diminished innovation are prohibited because they can be harmful to consumer welfare.[440] Since this harm is understood from an economic point of view, non-economic values (such as social cohesion, fundamental rights or a sustainable environment) fall outside the scope of the approach.[441] As such they are excluded when it comes to conducting an analysis of consumer welfare harm.[442]

[429] Ioannis Lianos, 'Some Reflections on the Question of the Goals of EU Competition Law' (2013) UCL Centre for Law, Economics and Society Research Paper Series 3/2013.

[430] Ibid. There is no explicit mention in EU legal documents that consumer protection is the sole aim of competition law or that other aims cannot be adopted.

[431] See for example: European Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings [2009] OJ C 45/7, para 19.

[432] Ioannis Lianos, 'Some Reflections on the Question of the Goals of EU Competition Law' (2013) UCL Centre for Law, Economics and Society Research Paper Series 3/2013.

[433] Konstantinos Stylianou and Marios Iacovides, 'The goals of EU competition law: a comprehensive empirical investigation' [2022] Legal Studies 620. See Table 2 of the work.

[434] Ioannis Lianos, 'Some Reflections on the Question of the Goals of EU Competition Law' (2013) UCL Centre for Law, Economics and Society Research Paper Series 3/2013.

[435] EU competition law seems, however, to emphasise more consumer surplus than producer surplus. See Ibid.

[436] Barbara E Baarsma, 'Rewriting European Competition Law from an Economic Perspective' [2011] European Competition Journal 559.

[437] Adi Ayal, *Fairness in Antitrust* (Bloomsbury Hart 2016).

[438] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[439] Ibid.

[440] Herbert Hovenkamp, 'Is Antitrust's Consumer Welfare Principle Imperiled?' [2019] Journal of Corporate Law 65.

[441] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[442] That is not to say that proponents of a narrow consumer welfare standard consider non-economic values unimportant. Rather, they are difficult to feature in such an analysis since it is not easy to quantify these values in monetary terms.

3.2 The broad/inclusive consumer welfare standard

Nevertheless, the consumer welfare standard is not monolithic.[443] The lack of precise definition of 'consumer welfare' in the Treaties and EU and Member State competition regimes opens the doors to multiple interpretations. Some argue that consumer welfare should go further than just economic considerations. A terminological argument is that welfare itself can mean 'well-being', 'health', or 'comfort' for individuals. Thus, it encompasses more than only 'profit' in a financial sense.[444] A legal argument is then that a more non-economic interpretation of consumer welfare is possible (and perhaps even encouraged) by the constitutional framework of the Union.[445] For example, Article 3(1) TFEU notes that the aim of the EU is to promote 'the well-being of its peoples.'[446] Given this overarching aim, consumer welfare could be widened to include varied well-being concerns, such as safety and protection of human rights.[447] This is the idea behind the *broad* consumer welfare standard. This broad(er) interpretation is more receptive to including non-economic interests.[448] However it encompasses these non-economic aspects only to the degree that they impact the same group of consumers facing price increases.[449] This approach is not purely theoretical. It has already been implemented in the work of certain Member State Competition Authorities. The Greek and Dutch competition authorities have used a more open standard by attempting to quantify externalities and (indirectly) incorporate them into the competition analysis.[450] The Commission has partially addressed this broader standard in its draft guidelines on horizontal cooperation.[451] In essence, the Commission underscored that Article 101(3) TFEU could offer leeway for other considerations to be viewed as efficiencies.[452] These encompass not only reductions in production and distribution costs but also enhancements in product quality, variety, innovation, or refining the production and distribution processes.[453] However, the extent to which these other considerations must be linked to the same group of consumers in the same market remains uncertain.[454] As this linkage is stretched further, the interpretation of the consumer welfare standard becomes more contentious. [455]

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[443] In the sense that there are multiple and differing interpretations possible. As such, some consider consumer welfare to be the most 'abused' term in competition/antitrust. See Joseph F Brodley, 'The economic goals of antitrust: efficiency, consumer welfare, and technological progress' [1987] New York University Law Review 1020.

[444] Simon Holmes, 'Climate change, sustainability, and competition law' [2020] Journal of Antitrust Enforcement 354.

[445] Ibid.

[446] Article 3(1) TFEU.

[447] Simon Holmes, 'Climate change, sustainability, and competition law' [2020] Journal of Antitrust Enforcement 354.

[448] Kati Cseres, 'The Controversies of the Consumer Welfare Standard' [2006] Competition Law Review 121.

[449] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[450] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.

[451] These considerations are primarily sustainability-related. Roman Iderst, *Incorporating Sustainability into an Effects-Analysis of Horizontal Agreements - Expert advice on the assessment of sustainability benefits in the context of the review of the Commission Guidelines on horizontal cooperation agreements* (Publications Office of the European Union 2022).

[452] Ibid.

[453] Ibid.

[454] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[455] Ibid

In response to these difficulties, Gerbrandy and Claasen present an idea of a third standard: the inclusive version of consumer welfare. In comparison with a broad consumer welfare perspective, this standard directly incorporates non-economic interests. In doing so, it does not require a connection to the same group of consumers. It achieves this by adopting a broader interpretation of 'welfare' and including quantified non-economic benefits into the assessment process.[456] This standard operates under the premise that anything can be articulated in terms of preferences. Thus, anything can be quantified and compared, by eliciting consumers' preferences and using willingness-to-pay quantification in monetary terms.[457] However, an inclusive approach to consumer welfare is not without its problems. Even under a more inclusive vision, it could still be difficult to quantify public interests. Gerbrandy and Claassen conclude that if we want to fully analyse non-economic values we should move beyond the inclusive welfare standard.[458] What is required is a standard outside welfarism, such as one based on the capability-approach.[459] However, the discussion of consumer welfare and capabilities falls outside of the scope of this work.[460] What is relevant to note is that alternative views of consumer welfare do exist and that they could in theory be adopted. Whether this is truly achievable is debatable. The shift in US antitrust to Neo-Brandeisianism illustrates the possibility of change.[461] At the same time, such changes might be easier to achieve in the US than in the EU system. In the US antitrust positions are politically appointed.[462] Further, the US has a two-party system and a pendulum style of democracy, which almost guarantees that strong policy changes will happen every few years.[463] Overall this style of governance can favour more 'radical' transitions in policy than a European parliamentary system could.[464] Based on these perspectives of consumer welfare, the following section explores scenarios of integration. As we will see, integration could differ based on the consumer welfare standard used.

4. Possible scenarios of integration between the AI Act and Competition Law

Integration comes in two forms: one where there is harmony between the existing law and the new one, and another where conflicts arise, necessitating a balance. The first type of integration revolves

[456] Ibid.

[457] Ibid.

[458] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[459] Their proposal is built upon the Capability theory advanced by Martha Nussbaum (legal philosopher) and Amartya Sen (economist). This theory looks at the capacity of people to use a right rather than the theoretical existence of that right. See Amartya Sen, *Commodities and Capabilities* (Oxford University Press 1985) and Martha Nussbaum, *Creating capabilities* (Harvard University Press 2013).

[460] While I do consider this proposal for a new approach to be interesting, I also consider that completely renouncing the consumer welfare standard is unlikely to happen in EU competition law.

[461] Still, I would argue that Neo-Brandeisianism operates with a broad consumer welfare standard rather than a fully capability-based approach.

[462] Chapter II, section 2.5. See also: Theodore Voorhees Jr., 'The Political Hand In American Antitrust - Invisible, Inspirational, Or Imaginary?' [2014] Antitrust Law Journal 557.

[463] Frank Hendriks, *Vital Democracy: A Theory of Democracy in Action* (Oxford University Press 2010).

[464] Ibid.

around aligning the AI Act's human-centric goals with competition law regulations.[465] This is achieved without balancing safety and human rights against competition. Conversely, the second form of integration navigates a more nuanced interaction between the AI Act and competition laws, where a balancing of the two is needed.[466]

4.1 The First form of integration: a scenario

Under a broad/inclusive consumer welfare standard, non-economic interests are factored into the analysis of harm to consumer welfare.[467] If both the Act and competition law acknowledge among their goals the protection of non-economic values (such as safety and human rights), then one could argue that there is no longer conflict between the two. This would lead to what Nowag regards as the first form of integration. It is a type of integration characterised by the possibility of bringing the AI Act in line with the competition provisions without needing to balance one against the other.[468] In other words: protecting competition and protecting individuals from AI-induced harm (HCAI) can be pursued at the same time without conflict. The advantage of such integration is that it is, according to Nowag, easier to achieve.[469] If both the AI Act and competition law have as aims protecting non-economic interests, there is then no need to partake in a balancing exercise, which could be difficult to carry out.[470] This form of integration requires instead the relevant EU and Member State authorities to examine the Act's provision in a way that does not restrict competition.[471] In theory, this could be achievable. The AI Act does stipulate that practices which are already prohibited in EU competition law should not be affected by the Act.[472] In practice, however, there can be potential tensions. For example, Article 13 of the AI Act's obligation to make data logs transparent and the Article 101 TFEU prohibition of sharing of commercially sensitive information.[473] The first form of integration could solve such tension by having relevant authorities interpret Article 13 to mean that commercially sensitive information is excluded from this duty of transparency. Further dialogue would likely also take place between the EU AI Office and other relevant authorities to avoid similar conflicts. Essentially, the EU AI Act and competition law remain separate instruments that have some common aims. The 'trickle-down' effect does not need to occur because this (hypothetical) version of EU competition law already uses a broader/inclusive

[465] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149. See also: Julian Nowag and Alexandra Teorell, 'Beyond Balancing: Sustainability and Competition' (2013) Lund University Legal Research Paper Series 9/2020.
[466] Ibid.
[467] While I am aware of the distinction between the broad and inclusive standards, I hold the view that whether it is indirect or direct might not have much of an impact on the integration type. Both would still favour the first from more.
[468] Julian Nowag and Alexandra Teorell, 'Beyond Balancing: Sustainability and Competition' (2013) Lund University Legal Research Paper Series 9/2020.
[469] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.
[470] Ibid.
[471] Ibid.
[472] EU AI Act, Recital 45.
[473] See Chapter III section 3.1.

perspective. This leads to it being more in alignment with the HCAI approach, in the sense that non-economic interests such as safety are taken into consideration. However, it is unclear whether this could counterbalance Modern Bigness. Viewing the two as aligned but separate would mean that if it is not through the direct influence of the Act but rather through a broad/inclusive consumer welfare standard alone that the effects of Modern Bigness would need to be regulated.

4.2 The Second form of integration: a scenario

The AI Act has a human-centric approach to regulating AI. This HCAI approach prioritises human rights and safety.[474] These values are difficult to quantify from an economic perspective. It is unlikely that they can be evaluated through economic efficiency metrics. Consequently, they usually do not feature within the narrow analysis of consumer welfare.[475] Instead of an immediate 'trickle-down' and a counterbalancing of Modern Bigness, there is now a scenario of potential conflict. If conflict between the existing laws (here, competition law) and the new ones (here, the EU AI Act) is unavoidable then we are dealing with the so-called second form of integration. According to Nowag, the second integration type is more difficult to achieve. This is because it requires performing a balancing test.[476] Yet, it is important to note this is not a 'wild balancing' exercise.[477] The grounds for it to take place are the relevant competition law provisions, namely Article 101 (1) and Article 101 (3) TFEU.[478] Usually, the 101 test is for agreements that restrict competition. If we are looking at it from the perspective of integration, then we need to slightly change the questions it asks. In short, assessment under Article 101 entails two components. First, it must be analysed if an agreement has an anti-competitive objective or actual (or potential) anti-competitive effects.[479] The second (only applicable when an agreement restricts competition) involves determining the pro-competitive advantages generated by that agreement and assessing whether these benefits outweigh the anti-competitive effects. This kind of balancing of anti-competitive and pro-competitive effects is conducted within the framework laid down in Article 101 (3).[480] According to the first condition of Article 101 (3), the restrictive agreement must enhance the production or distribution of goods or foster technical or economic progress.[481] This provision defines types of efficiency gains that can be taken into account. If we are changing this test to be suited to the further tests of the second, third

[474] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).
[475] See previous section of this Chapter.
[476] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.
[477] Julian Nowag and Alexandra Teorell, 'Beyond Balancing: Sustainability and Competition' (2013) Lund University Legal Research Paper Series 9/2020. See also: Julian Nowag, *Environmental Integration in Competition and Free-Movement Laws* (Oxford University Press 2017).
[478] Julian Nowag and Alexandra Teorell, 'Beyond Balancing: Sustainability and Competition' (2013) Lund University Legal Research Paper Series 9/2020.
[479] Article 101 (3) TFEU. See also: European Economic & Marketing Consultants, *Article 101 (3) TFEU* (Competition Competence Report).
[480] Article 101 (3) TFEU.
[481] European Commission, Guidelines on the application of Article 81(3) [now 101(3)] of the Treaty [2004] 2004/C 101.

and fourth conditions of Article 101 (3) would most likely not need to be included.[482]Another change would be to include in the definition of qualitative efficiencies of 101 (3) provisions that create value by promoting social progress, not only technical or economic progress.[483] The 'updated' test would then be composed of the following questions:[484]

1. Does this provision (of the AI Act) have an anti-competitive objective or actual (or potential) anti-competitive effects?
2. (If the answer to the previous question is yes) then what are the pro-competitive advantages generated by this provision? Could these benefits outweigh the anti-competitive effects?
3. Does the restrictive provision contribute to improving the production or distribution of goods or to promoting technical, economic, or social progress?

If the balancing test shows that restricting competition in favour of a human-centric value is favourable, then it could be said that the Act has succeeded in influencing competition law. Depending on the nature of the provision analysed, some of the effects of Modern Bigness could perhaps be curtailed. Take as an example the previously mentioned conflict between Article 13 of the Act and Article 101 TFEU. Under this form of integration, a balancing test would be required. Let's say that the answer of the test is that yes. The article's potentially anti-competitive effects are permissible because safeguarding consumers from high-risk AI technologies outweighs competition interest. This could signal that human-centric values can influence competition law and the (narrow) consumer welfare analysis. As result, the social and political ramifications of Modern Bigness that normally fall outside the sphere of competition could, if this balancing test favours the AI Act, be factored in.[485]

However, these scenarios are not without controversies. After all, both are reliant on integration frameworks that have yet to be acknowledged in practice.[486] The second form of integration in particular is reliant on variables - if the balancing test of 101 TFEU can be conveniently 'tweaked', if the answer of the balancing test would be in favour of the AI Act, if efficiencies can be understood as including non-economic factors. As such both scenarios remain hypothetical conceptualisations of how the AI Act-competition law relation could play out. A perhaps more realistic scenario (but still hypothetical, given that it is essentially an exercise in imagination) could be developed by looking at the GDPR-competition law relation.

[482] I based this decision on the difficulty of changing the questions (which are designed to look at agreements) to focus on legislative provisions.

[483] Julian Nowag and Alexandra Teorell, 'Beyond Balancing: Sustainability and Competition' (2013) Lund University Legal Research Paper Series 9/2020.

[484] This is a possible version of questions. Nowag proposes a somewhat similar series of questions (see Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149, 152.

[485] Specifically, in this example, that would be the black box effect caused by the opacity of Big Techs' technologies. See Chapter III for more.

[486] While embraced by some practitioners (see Simon Holmes, 'Climate change, sustainability, and competition law' [2020] Journal of Antitrust Enforcement 354), there is still no clear sign that this integration framework is to be adopted by the European Commission anytime soon.

4.3 A Third scenario: the GDPR as an example of integration

The AI Act and the GDPR are to an extent similar. Neither are competition regulations. Yet both have, or in the case of the Act, are likely to have, an impact on competition law. Nowadays there are debates about the relation between the AI Act and competition law. Previously, there were (and still are) debates about the relation between data protection and competition law.[487] An important addition to this debate is the 2023 judgement of *Meta v Bundeskartellamt*.[488] The case concerns a 2019 ruling of the Bundeskartellamt (the German National Competition Authority). The Bundeskartellamt analysed Meta's practices of merging personal data from its various services with data collected through integrating its services into third-party platforms.[489] It concluded that such practices were both a breach of competition law and of data protection law.[490] This raised questions on the connection between violations of non-competition law provisions and competition law as well as whether competition authorities can use in their decisions regulations that are not part of competition law (in this case, data protection law).[491] An appeal from Meta followed.[492] Eventually, the case reached the European Court of Justice. The ECJ held that a competition authority has the discretion to view violations of GDPR as an indicator of potential abuse of dominance.[493] However, to do so, the competition agency must first cooperate with the relevant data protection authority.[494] There are two key take-aways here. First, that a violation of a non-competition legal provision can lead to a violation of competition law. As such, competition authorities can take into account regulations that are not part of competition law when relevant to their analysis. Second, that competition authorities should collaborate and coordinate with non-competition regulators from the investigation stage all through to the monitoring stage.[495] Taking non-competition policies into account could play a pivotal role in pinpointing anti-competitive behaviour and devising appropriate remedies. This collaborative method ensures harmony between competition regulations and data privacy laws, mitigating the risk of conflict in either area of regulation.[496] By embracing the principle of sincere cooperation, the Court has paved the way for deeper integration between data

[487] See for instance: Inge Graef, *EU Competition Law, Data Protection and Online Platforms* (Wolters Kluwer 2016); Klaus Wiedemann, 'Data Protection and Competition Law Enforcement in the Digital Economy: Why a Coherent and Consistent Approach is Necessary' [2021] IIC - International Review of Intellectual Property and Competition Law 915.

[488] Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21)[2023] ECLI:EU:C:2023:537.

[489] Bundeskartellamt, Decision B6-22/16 of 6 February 2019.

[490] Ibid, paras 940 and 946.

[491] This was also highlighted by the ECJ, see: Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21)[2023] ECLI:EU:C:2023:537, para 43.

[492] Oberlandesgericht Düsseldorf, Judgement of 26 August 2019, WRP 2019 *Facebook v Bundeskartellamt*. Note: Meta was still named 'Facebook' at the time.

[493] Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21) [2023] ECLI:EU:C:2023:537, para 48 ('it may be necessary for the competition authority (...) also to examine whether that undertaking's conduct complies with rules other than those relating to competition law, such as the rules on the protection of personal data').

[494] Ibid, see para 58.

[495] Arletta Gorecka, 'On the interplay between competition law and privacy: the impact of Meta Platforms case' [2024] European Competition Journal 1. See also: Peter J. van de Waerdt, 'Meta v Bundeskartellamt: Something Old, Something New' [2023] European Papers 1077 and Anne C. Witt, 'Meta v Bundeskartellamt - data-based conduct between antitrust law and regulation' [2024] Journal of Antitrust Enforcement 1.

[496] Arletta Gorecka, 'On the interplay between competition law and privacy: the impact of Meta Platforms case' [2024] European Competition Journal 1.

protection and competition laws.[497] While the case originates from German national law, there is a strong indication that a similar approach could extend to the European Commission.[498] It could be possible to see a similar scenario play out for the AI Act. In a supposed future case, a European Court could rule that breaches of certain AI Act provisions can cause breaches of competition law. This is not entirely out of the realm of possibility. AI technologies could be used in a manner that restricts competition and harms consumer welfare. For instance by rising the risk of collusion or of personalised pricing which in turn leads to price discrimination.[499] The conclusion could also be that there is a duty of sincere cooperation between competition law authorities and the to-be-established AI agencies. This approach could then be situated somewhere between the two forms of integration. It acknowledges that the Act should be interpreted as to avoid conflicts (first form of integration) but at the same time the acts would not be completely separated since provision from the AI Act could be taken into consideration when assessing possible competition law violations (second form of integration). Still, if such judicial clarification were to come, it would probably be years into the future. The AI Act likely comes into full force in 2026[500] and proceedings before courts can take years to finalise. Further, it would likely play out in a different manner, given that for the enforcement of the GDPR there are national data protection agencies, while for the AI Act there will be agencies at the EU level such as the EU AI Office and the AI Board.[501]

5. Conclusion: AI Act, Modern Bigness, and competition law

This chapter has examined the potential (*abstracto*) impacts of the AI Act on the aims of competition law. Yet the conclusion to be drawn is somewhat ambiguous. Whether the Act influences competition goals hinges on how the Commission interprets consumer welfare. Based on the chosen interpretation, the scenarios vary. While there is still a possibility of a 'trickle-down' effect of the AI Act on competition law, this is neither guaranteed nor imminent. The uncertainty of how the relation between the two could play out is underscored by the example of the GDPR, where it took several years for the relationship between the regulation and its consequences on competition laws to become clear. In the forthcoming (and final) chapter, I intend to look back at the topics explored throughout this work and offer a perhaps anticlimactic answer to my research question. Can human-centric AI as conceptualised in the EU AI Act help broaden the aims of competition law and in doing so counterbalance Modern Bigness? *It depends.*

[497] The principle is codified in Article 4 (3) TFEU. See Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21) [2023] ECLI:EU:C:2023:537, Opinion of AG Rantos, para 28.

[498] Peter J van de Waerdt, 'Meta v Bundeskartellamt: Something Old, Something New' [2023] European Papers 1077.

[499] These are likely examples. OECD [2021], *OECD Business and Finance Outlook 2021: AI in Business and Finance.*

[500] See the previous Chapter.

[501] Which will most likely collaborate with Member State market surveillance authorities in investigating non-compliance with the act. See EU AI Act, Article 64.

Chapter 5: Concluding Remarks

1. Introduction: a short summary of the previous chapters

My thesis began with a somewhat controversial statement: that current societal challenges have made us more pessimistic towards the future. This generalisation served as a means to introduce the readership to a more specific subset of such challenges: those related to *Bigness*. While this work addresses several topics - the EU AI Act, the aims of competition law, their potential for evolution, and variations of the consumer welfare standard - they are all united under the conceptual umbrella of Bigness. And not just any kind of Bigness. Modern Bigness. The term, coined by Gerbrandy, refers to the new forms of power that large companies, particularly Big Tech firms, have accumulated in recent years.[502] The vast influence of these firms stretches the traditional understanding of power in competition law, which has typically been viewed as market dominance.[503] Power, according to this view, can also be of political and social nature.[504] And if power can be multifaceted, this leads to the following question: should competition law's aims also be multifaceted? The debate on whether competition law should extend beyond the idea of consumer welfare to include non-economic interests (such as promoting a sustainable environment or safeguarding human rights) remains ongoing.[505] My thesis can be seen as a contribution to this conversation. However, it is an addition that is a bit atypical. It does not begin by analysing competition law provisions or the Treaties but rather from something that is not even part of the competition law system: the EU AI Act. Although the AI Act will come fully into force in the coming years, it is likely to exert some degree of influence on competition law when it does.[506] If we accept this premise, then what type of impact can we expect to see? Moreover, is it conceivable that the AI Act could lead to a 'trickle-down' effect on the objectives of competition law? To explore these questions and more, my plan was twofold. This is evidenced by the structure of the main research question:

Can human-centric AI as conceptualised in the EU AI Act help broaden the aims of competition law and in doing so counterbalance Modern Bigness?

To address this question, the initial step was to explore whether the Act's human-centric approach could have an impact on competition law and its aims. The second step was to see if this impact could lead to a more effective response to Modern Bigness. To facilitate this analysis, I structured the work as follows. In the first Chapter I laid out the structure, and the methodology that were used in this research. I introduced the reader to some of the concepts that would later on be used. In the second chapter I focused on detailing the notion of Bigness, which is central for understanding the research topic. In doing so, I made use of a legal-historical approach. This approach allows for a better conceptualisation of how Bigness has evolved over time and its implications in the present-day context. It is also, as the reader might have noted, distinct from the approaches used in other

[502] Anna Gerbrandy, 'Conceptualizing Big Tech as 'Modern Bigness' and its implications for European Competition Law', European research Council Proposal <https://cordis.europa.eu/project/id/852005> accessed 19 May 2024.

[503] Richard Whish and David Bailey, *Competition Law* (7th edition Oxford University Press 2012).

[504] See Chapter II for more.

[505] Daniel Zimmer (ed), *The Goals of Competition Law* (Edward Elgar 2012).

[506] Thibault Schrepel, 'Decoding the AI Act: A Critical Guide for Competition Experts'(2023) Amsterdam Law & Technology Institute 10/2023. See also: EU AI Act, Recital 9.

chapters. I deemed this choice necessary given the subject matter of the chapter. As the concept of Modern Bigness is not yet part of the mainstream legal jargon, it was necessary to take a step back and explain to the readership two aspects. First, how (Modern) Bigness originated and second, how it connects with the discourse on the aims of competition law. As such, I traced its development, starting from the Sherman Act and the influence of Louis Brandeis. I looked at the role of the Harvard and Chicago Schools in developing the perspectives on the aims of antitrust. Later, I delved into the interpretations introduced by Post-Chicago and Neo-Brandeisians and how they shaped the governmental response to Bigness. Ultimately, it became evident that there has been a shift in the discourse surrounding the objectives of antitrust laws in the US, particularly in the last four years.[507] After concluding the first part of this Chapter, namely the exploration of the American antitrust landscape, I mirrored this analysis for a discussion of competition law and Bigness in Europe and the European Union. I discovered that the origins of competition law can be traced back to the Austrian legal system (and even further back, to the Napoleonic codes).[508] I then looked at the impact of Ordoliberalism on the aims of competition law, as well as how the EU was influenced by the American adoption of a consumer welfare standard in its own approaches to protecting competition. I concluded by noting that while the EU has not had an outspoken embrace of Neo-Brandeisian principles and approaches as has been the case in the US, the discourse has started to change in the past decade on whether competition law should be doing more, particularly in the context of sustainability.[509] Overall, I highlighted the fact that Bigness as a concept has always been tied with the discussions surrounding the aims of antitrust and competition law. In the following two chapters I focused on the core of the work, namely the analysis of the AI Act in the context of competition law and Modern Bigness. In Chapter III, I examined the *in concreto* (concrete) influence of the Act on the EU competition legal system. I began by first discussing how the AI Act's human-centric approach can be understood, especially in relation with the complimentary notion of 'trustworthiness.'[510] This section outlined a series of anticipated effects that the Act is likely to have on the competition law system. Such effects could be, for instance, diminished access to the single market for smaller companies or clashes between the right to safety and corporate secrecy.[511] After establishing that it could be possible for the AI Act to have 'concrete' impacts on the current competition legal system of the EU, I wanted to explore the more 'abstract' likelihood of the Act leading to changes in what the goals of competition law are perceived to be. This was the aim behind the fourth chapter of this work. In Chapter IV, I argued that a 'trickle-down' of the Act's HCAI approach is not entirely implausible. Still, it is reliant on several factors. For instance, whether we operate with a broad/inclusive or a narrow standard of consumer welfare. Based on these factors, I laid out a few scenarios for how a possible integration between the Act within EU competition laws could look like. The scenarios were structured around Nowag's theories of integration.[512] A first

[507] See Chapter II.

[508] David J Gerber, 'The Origins of European Competition Law in Fin-de-Siècle Austria' [1992] American Journal of Legal History 405.

[509] Anca D Chirita, 'A Legal-Historical Review of the EU Competition Rules [2014] International and Comparative Law Quarterly 281.

[510] Independent High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI* (European Commission Guidelines 2019).

[511] See Chapter III.

[512] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.

scenario was based on the idea of integrating the AI Act with the competition legal system without the need to weigh one against the other. The second is based on the idea of a balancing exercise between the two.[513] The third was based on a real life' case study of the relation between the GDPR and competition law. I argued that given some of the similarities between the GDPR and the AI Act, it could be possible to see an à la *Meta v Bundeskartellamt*[514] situation play out at some point in the future. Based on the analysis, my conclusion was that it cannot be said for certain which (or if any) of these scenarios will materialise. It could be too simplistic to state only one definitive answer, such as 'there will be little to no influence on the aims of competition law' or 'the Act is bound to usher in a human-centric approach in EU competition law.' After all, the Commission's approach is still something that could most accurately be described as a narrow consumer welfare approach.[515] In other words, the analysis is based on economic factors, and the more difficult to quantify, non-economic elements are removed from the equation.[516] Nevertheless, the absence of explicit legal obligations to adhere to the narrow consumer welfare leaves room for different perspectives regarding the potential scope of this standard. This has already been seen at the level of the national competition authorities in various Member States.[517] So the window of opportunity for human-centrism to be co-opted in current competition law approaches is open, if ever so slightly.

2. Answering the main research question

As hinted at in the fourth Chapter, the research that I have conducted has led me to a nuanced response to the research question. Not a clear 'Yes' or 'No', but a tentative 'Maybe.' An answer that varies on the scenario that we decide to take. There is potential for the Act to wield influence over competition law and thereby 'counterbalance' some of the impacts of Modern Bigness. But this depends on whether we regard as true that competition law can or should look beyond a narrow interpretation of consumer welfare. If we understand competition law as having been historically aimed at curtailing 'dangerous' forms of Bigness (i.e. abuse of a dominant position) then there is a point to be made about the validity of integrating human-centrism in its approaches. To illustrate, let us partake in a short exercise of imagination. Let us suppose that Big Techs had existed in the 19th and early 20th century in the same way that they do now. Thus not only as market-dominant entities but also as entities that could influence the outcomes of elections or the decisions one makes in their private life. Wouldn't it then have been likely that antitrust and competition regimes would emerge across the world as a response? And wouldn't it be likely for these regimes to have been created in such a way that responded to their multifaceted power?

At the same time, this line of argumentation is reliant on multiple factors. Hence the quizzical answer of 'It depends.' In the context of the AI Act, the *in concreto* effects would first have to take

[513] Ibid.

[514] Meta Platforms Inc and Others v Bundeskartellamt (Case C-252/21)[2023] ECLI:EU:C:2023:537.

[515] Adi Ayal, *Fairness in Antitrust* (Bloomsbury Hart 2016).

[516] Rutger Claassen and Anna Gerbrandy, 'Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach [2016] Utrecht Law Review 1.

[517] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.

place. Among the hypotheses outlined in this chapter, this appears most plausible. Conflicts between the Act and EU competition law are after all likely to happen.[518] If the *in concreto* effects take place as described in Chapter III (or at least in a similar manner), this then sets the ground for the *in abstracto* effects to happen. The degree of *in abstracto* influence could manifest itself in multiple ways: 'no trickle-down',[519] 'trickle-down',[520] and somewhat of a 'trickle-down.'[521] The type of integration we are expecting, if we operate with the current narrow consumer welfare standard, is then the so-called 'second form of integration.'[522] This integration could in fact lead to some influence of the Act on the aims of competition law.[523] An argument can be made that the zeitgeist is favourable enough for this to happen.[524] As Commissioner Vestager put it in a recent speech discussing the current approaches in competition law and the EU sustainability aims: 'is this really the best we can do?'[525]

I would argue that a similar comment can be applied to competition law and its response to Modern Bigness. The current approach might be accomplishing certain objectives, such as addressing harmful cartels and approving efficiency-enhancing mergers.[526] However, if it is also condoning (either explicitly or implicitly) the incessant growth of Big Techs power by failing to take into consideration non-economic interests, then this calls for a shift in methods. Once which the AI Act could have the potential to facilitate.

3. Limitations and further research

This work, though perhaps helpful in understanding the topic of the AI Act in connection with Modern Bigness and competition law, remains understandably incomplete. The most evident limitation that it faces is that it describes an Act that has yet to come into full force. As such, it is difficult to predict what the actual implementation of the Act would look like. What issues could arise, or what the response of Big Techs and other companies will be remains unknown. As a result, this thesis cannot account for all of the future aspects that could influence or limit the impacts of the Act on competition law and practice. My opinion is that there is likely that the *in concreto* effects will take place, which could impede the Act's overall efficiency. Nevertheless, at what point in time and in what manner remains open to see in the coming years (particularly from 2026 onwards). The exact form that the *in abstracto* effects will take is more difficult to pinpoint. A future research trajectory could therefore be on how the AI Act could independently counterbalance Modern Bigness without necessitating an impact on competition law. Moreover, this thesis does not explore

[518] See Chapter III.

[519] The First form of integration Scenario - See Chapter IV.

[520] The Second form of integration Scenario - See Chapter IV.

[521] The GDPR Scenario - See Chapter IV.

[522] Julian Nowag, 'Competition law's sustainability gap? Tools for an examination and a brief overview' [2022] Nordic Journal of European Law 149.

[523] See Chapter IV.

[524] See Chapter II and IV.

[525] Margrethe Vestager, EU Competition Commissioner, 'Making Markets Work for People' (Schumpeter Award Acceptance speech at the EGG Brussels, 27 October 2022).

[526] Simon Holmes, 'Climate change, sustainability, and competition law' [2020] Journal of Antitrust Enforcement 354.

the ramifications of the AI Act on corporate behaviour. Tech companies withdrawing from the EU. Smaller companies encountering obstacles in complying with the Act. Remaining companies possibly having to divest funding from R & D in order to adjust with the new provisions.[527] These scenarios present an intriguing avenue for research. At the same time, an avenue that is currently closed, given that the Act has yet to be implemented. While now an inevitable limitation, post-2026 the *in concreto* effects of the Act on companies could prove to be a worthwhile research topic.

It is reasonable to conclude that capturing all the nuances of this debate comprehensively may prove to be an impossible task. This underscores the challenges inherent in implementing a new Act to reshape an existing legal system, as well as the complexity of the topic at hand.

4. Final Remarks and a Comment on Uncertainty

The emergence of Modern Bigness, characterised by the dominance of a few tech giants over multiple aspects of our lives, raises critical questions about what this expanding power means for competition. These conglomerates wield substantial control over vast digital ecosystems, often blurring the lines between competitive practices and monopolistic behaviour. This already intricate situation can be further complicated by the rising usage of Artificial Intelligence technologies among businesses, big and small. Artificial intelligence has revolutionised the ways in which companies operate, enabling unprecedented efficiencies, personalised consumer experiences, and new business models. However, this technological leap also poses substantial risks. There is potential for AI to facilitate anti-competitive practices, such as collusion and market manipulation.[528] At the same time, AI can also lead to corporations gaining more influence and control over the social and political spheres.[529] Traditional competition law approaches might as result prove inadequate in addressing these new challenges, necessitating a more nuanced and/or adaptive regulatory approach. Still, this raises questions such as whether competition law is the right avenue for solving these problems. Whether its aims can be expanded and whether the AI Act can lead to this 'expansion' and counterbalance Modernly Big behaviour is uncertain. However, I would argue that this uncertainty can be seen as an advantage. To paraphrase a famous American Judge (and one that is this time not named Brandeis), much of the uncertainty of law is not an unfortunate accident, but rather something of immense social value.[530] The fact that aims of competition law are not explicitly laid down, that the consumer welfare standard remains open to interpretation, and that human-centrism is still an open concept allows for debate to happen. And debate paves the road to change.

[527] See Chapter III.
[528] See Chapters I and II of this work.
[529] See Chapter II.
[530] Jerome Frank, *Law and the Modern Mind* (Transaction Publishing 1930).

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