Merger Working Group

CONTROL OF DATA, MARKET POWER, AND POTENTIAL COMPETITION IN MERGER REVIEWS

REPORT





DRAFT REPORT ON THE CONTROL OF DATA, MARKET POWER, AND POTENTIAL COMPETITION IN MERGER REVIEWS

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I) SCOPE OF THE REPORT

1. In 2020, as a co-chair of the ICN Merger Working Group (MWG), the Administrative Council for Economic Defense (CADE) proposed a project within the scope of the 2020-2023 work plan¹ for the biennium 2021-2022. The project consists of a survey that contrasts and reports issues about the correlation of data control, market power, and potential competition in merger reviews.

2. As part of the project, the Merger Working Group collected information on the experience of ICN members in assessing data control, market power, and potential competition in merger reviews of digital markets. The data was gathered from a questionnaire distributed to 70 competition authorities and responded by authorities from 22 jurisdictons: Australia, Belgium, Brazil, Bulgaria, Canada, Chile, Colombia, the European Union, Germany, Hungary, Japan, Kenya, Lithuania, Mexico, Norway, Serbia, Slovenia, Spain, Sweden, Taiwan, Turkey, and the United Kingdom².

3. Some respondent agencies have indicated they did not have any case at all, or at least no relevant case, relating to digital markets³. However, several authorities, including nonrespondents, have published reports and studies on digital markets. The list below includes all such documents and independent reports used in preparing this report.

<u>Report</u>	<u>Link⁴</u>
Australian Competition and Consumer Commission, Digital Platforms Inquiry–Final Report, 2019	https://www.accc.gov.au/publications/digita l-platforms-inquiry-final-report
Australian Competition and Consumer Commission, Digital Platforms Inquiry – Discussion Paper for Interim Report Nº. 5: Updating competition and consumer law for digital platform services	https://www.accc.gov.au/system/files/Digital %20platform%20services%20inquiry.pdf
Autorité De La Concurrence and Bundeskartellamt, Competition Law and Data, 2016	https://www.bundeskartellamt.de/SharedDo cs/Publikation/DE/Berichte/Big%20Data%20 Papier.pdf? blob=publicationFile&v=2

¹ Available at: <https://www.internationalcompetitionnetwork.org/wp-content/uploads/2020/09/Workplan2020-23MWG.pdf>.

² Jurisdiction names throughout this report are presented for efficiency. All views and perspectives were expressed by competition agencies from the named jurisdictions.

³ Bulgaria, Lithuania, Norway, Serbia, Slovenia, Taiwan.

⁴ The Reports were last seen on March 1st of 2023.

<u>Report</u>	<u>Link⁴</u>
Autorité De La Concurrence, Publicité En Ligne: La Constitution D'un Écosystème En Forte Croissance Et Tiré Par Deux Acteurs, 2018	https://www.autoritedelaconcurrence.fr/sites /default/files/commitments/18a03.pdf
Brazil, CADE. Cadernos do CADE: Mercados de Plataformas Digitais, 2020	https://cdn.cade.gov.br/Portal/centrais-de- conteudo/publicacoes/estudos- economicos/cadernos-do-cade/plataformas- <u>digitais.pdf</u>
Bundeskartellamt, Background paper "Merger control in the digital age – Challenges and development perspectives (Meeting of the Working Group on Competition Law 29 September 2022)", 2022	https://www.bundeskartellamt.de/SharedDo cs/Publikation/EN/Diskussions_Hintergrund papiere/2022/Working Group on Competiti on_Law_2022.pdf;jsessionid=A083558CAFB5 4591EA2223612BD6B225.2_cid371?_blob=p ublicationFile&v=2
Bundeskartellamt and the Bundeswettbewerbsbehörde, Guidance on Transaction Value Thresholds for Mandatory Pre- merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), 20122	https://www.bundeskartellamt.de/SharedDo cs/Publikation/EN/Leitfaden/Leitfaden_Tran saktionswertschwelle.pdf;jsessionid=02F7A2 F33C977A29F1B3D501E02F4E3A.2_cid508?_ blob=publicationFile&v=2
Bundeskartellamt, Guidance on Substantive Merger Control, 2012	https://www.bundeskartellamt.de/SharedDo cs/Publikation/EN/Leitlinien/Guidance%20- %20Substantive%20Merger%20Control.pdf? blob=publicationFile&v=6
Bundeskartellamt, Working Paper: The Market Power of Platforms and Networks, 2016	https://www.bundeskartellamt.de/SharedDo cs/Publikation/EN/Berichte/Think-Tank- Bericht- Zusammenfassung.pdf? blob=publicationF <u>ile&v=2</u>
CMA, Competition and Markets Auth., Online platforms and digital advertising market study,	https://assets.publishing.service.gov.uk/med ia/5fa557668fa8f5788db46efc/Final report Di
2020	gital_ALT_TEXT.pdf
CMA. A new pro-competition regime for digital markets Advice of the Digital Markets Taskforce, 2020	https://assets.publishing.service.gov.uk/med ia/5fce7567e90e07562f98286c/Digital_Taskfor ceAdvice.pdf
Comisión Federal De Competencia Económica, Rethinking Competition in the Digital Economy, 2018	https://www.cofece.mx/wp- content/uploads/2018/03/EC- EconomiaDigital_web_ENG_letter.pdf
Commission "Competition Law 4.0," German Federal Ministry for Economic Affairs and Energy,	https://www.bmwk.de/Redaktion/EN/Publik ationen/Wirtschaft/a-new-competition-

<u>Report</u>	<u>Link⁴</u>
A New Concentration Francescol Conthe Distribution	for an annual for the disting
A New Competition Framework for the Digital Economy, 2019	<u>framework-for-the-digital-</u> economy.pdf? blob=publicationFile&v=3
Competition and Markets Auth., Digital	https://assets.publishing.service.gov.uk/med
Comparison Tools Market Study-Final Report,	ia/59c93546e5274a77468120d6/digital-
2017	<u>comparison-tools-market-study-final-</u> <u>report.pdf</u>
	https://ised-isde.canada.ca/site/competition-
Competition Bur. Canada, Big Data and	bureau-
Innovation: Key Themes for Competition Policy in	canada/sites/default/files/attachments/2022/
Canada, 2018	CB-Report-BigData-Eng.pdf
Composition Commission of India Market Study	https://www.cci.gov.in/images/marketstudie
Competition Commission of India, Market Study on E-Commerce in India: Key Findings and	/en/market-study-on-e-commerce-in-india-
Observations, 2020	<u>key-findings-and-</u>
	observations1653547672.pdf
Japan Fair Trade Commission, Competition Policy	https://www.jftc.go.jp/en/pressreleases/yearl
Research Center, Report of Study Group on Data	<u>y-2017/June/170606.html</u>
and Competition Policy, 2017	
Japan Fair Trade Commission Report Regarding Trade Practices on Digital Platforms: Business-To-	https://www.jftc.go.jp/en/pressreleases/yearl
Business Transactions On, 2019	<u>y-2019/October/191031.html</u>
	https://www.jftc.go.jp/en/legislation_gls/imo
Japan Fair Trade Commission, Merger Guideline	<u>nopoly guidelines files/191217GL.pdf</u>
	https://cdn.cade.gov.br/Portal/centrais-de-
	conteudo/publicacoes/estudos-
Brazil, CADE. Working Paper no. 005/2020	economicos/documentos-de-
Concorrência em Mercados Digitais: uma revisão	trabalho/2020/documento-de-trabalho-n05-
dos relatórios especializados, 2020	2020-concorrencia-em-mercados-digitais-
	<u>uma-revisao-dos-relatorios-</u>
Data Privacy Brazil, A multijurisdictional analysis	<u>especializados.pdf</u> <u>https://www.dataprivacybr.org/wp-</u>
of data-driven mergers: current assessment and	content/uploads/2021/11/dpbr_data_driven_
public policy proposals for Brazil, 2021	mergers_english.pdf
	https://assets.publishing.service.gov.uk/gove
Digital Competition Expert Panel, Unlocking	rnment/uploads/system/uploads/attachment
Digital Competition: Report of the Digital	data/file/785547/unlocking digital competi
Competition Expert Panel, 2019	tion_furman_review_web.pdf
European Commission, Competition Policy for	https://ec.europa.eu/competition/publication
Digital Era, A report by Jacques Crémer, Yves-	s/reports/kd0419345enn.pdf
Alexandre de Montjoye Heike Schweitzer, 2019	

<u>Report</u>	Link ⁴
European Commission - Commission Staff Working Document evaluation of procedural and jurisdictional aspects of EU merger control, 2016	https://ec.europa.eu/competition/consultatio ns/2016_merger_control/spanish_competitio n%20_authority_en.pdf
European Commission, Final Report on the E- Commerce Sector Inquiry, 2017	http://www.ecommercesectorinquiry.com/fil es/sector_inquiry_final_report_en.pdf
European Comission: Commission Notice on the definition of the relevant market for the purposes of Union competition law, OJ C 1645, 22.2.2024.	<u>https://eur-lex.europa.eu/legal-</u> content/EN/TXT/PDF/?uri=OJ:C_202401645
European Competition Authority. Principles on the application, by National Competition Authorities within the ECA, of Articles 4(5) and 22 of the EC Merger Regulation, 2005	https://ec.europa.eu/competition/ecn/eca_ref erral_principles_en.pdf
European Competition Network, Report on the Monitoring Exercise Carried Out in the Online Hotel Booking Sector by EU Competition Authorities in 2016.	https://ec.europa.eu/competition/ecn/hotel monitoring_report_en.pdf
Heike Schweitzer, Justus Haucap, Wolfgang Kerber & Robert Welker, German Federal Ministry for Economic Affairs and Energy, Modernising the Law on Abuse of Market Power: Summary of the Report's Recommendations, 2018.	<u>https://lawprofessors.typepad.com/files/mod</u> <u>ernisation-of-abuse-summary-of-the-</u> <u>recommendations-fin3.pdf</u>
Lear, Ex-Post Assessment of Merger Control Decisions in Digital Markets – Final Report, 2019	https://assets.publishing.service.gov.uk/gove rnment/uploads/system/uploads/attachment
OECD, The Role and Measurement of Quality in Competition Analysis, 2013	https://www.oecd.org/competition/Quality- in-competition-analysis-2013.pdf
OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018	https://one.oecd.org/document/DAF/COMP(2018)2/en/pdf
OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020	https://one.oecd.org/document/DAF/COMP/ <u>M(2020)2/ANN6/FINAL/en/pdf</u>
OECD, Start-ups, Killer Acquisitions and Merger Control, 2020	https://www.oecd.org/daf/competition/start- ups-killer-acquisitions-and-merger-control- <u>2020.pdf</u>
OECD, The Role and Measurement of Quality in Competition Analysis, 2013	https://www.oecd.org/competition/Quality- in-competition-analysis-2013.pdf

<u>Report</u>	<u>Link⁴</u>
OECD, Big data: Bringing competition policy to the digital era, 2016	https://www.oecd.org/competition/big-data- bringing-competition-policy-to-the-digital- <u>era.htm</u>
OECD, Competition Committee Hearing on Disruptive Innovation, 2017	https://one.oecd.org/document/DAF/COMP/ <u>M(2015)1/ANN8/FINAL/en/pdf</u>
OECD, Rethinking Antitrust Tools for Multi-Sided Platforms, 2018	https://www.oecd.org/competition/rethinkin g-antitrust-tools-for-multi-sided- platforms.htm
OECD, Practical approaches to assessing digital platform markets for competition law enforcement: Background note by the Secretariat for the Latin American and Caribbean Competition Forum, 2019	<u>https://one.oecd.org/document/DAF/COMP/</u> <u>LACF(2019)4/en/pdf</u>
OECD, Roundtable on Conglomerate Effects of Mergers - Background Note by the Secretariat, 2020	https://www.oecd.org/daf/competition/congl omerate-effects-of-mergers.htm
OECD, A Roadmap Toward a Common Framework for Measuring the Digital Economy: Report for the G20 Digital Economy Task Force, 2020	https://www.oecd.org/sti/roadmap-toward- a-common-framework-for-measuring-the- digital-economy.pdf
OECD, Conglomerate Effects of Mergers - Background note by the Secretariat, 2020	https://one.oecd.org/document/DAF/COMP(2020)2/en/pdf
OECD, Consumer Data Rights and Competition: Background note by the Secretariat, 2020	https://one.oecd.org/document/DAF/COMP(2020)1/en/pdf
OECD, Data portability, interoperability and digital platform competition, OECD, Competition Committee Discussion Paper, 2021	https://www.oecd.org/sti/roadmap-toward- a-common-framework-for-measuring-the- digital-economy.pdf
OECD, Mapping data portability initiatives, opportunities and challenges, 2021	<u>https://www.oecd-</u> <u>ilibrary.org/docserver/a6edfab2-</u> <u>en.pdf?expires=1675290270&id=id&accname</u> <u>=guest&checksum=1B42BBF62115F53BC5832</u> <u>3B1B4C9326F</u>
OECD, Handbook on Competition Policy in the Digital Age, 2022	https://www.oecd.org/publications/mapping -data-portability-initiatives-opportunities- and-challenges-a6edfab2-en.htm
OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022	https://www.oecd.org/daf/competition/the- evolving-concept-of-market-power-in-the- digital-economy-2022.pdf

<u>Report</u>	Link ⁴
OECD, An Introduction to Online Platforms and Their Role in the Digital Transformation, 2019	https://read.oecd-ilibrary.org/science-and- technology/an-introduction-to-online- platforms-and-their-role-in-the-digital- transformation 53e5f593-en#page3
OECD, Global Merger Control, Competition Trends, OECD Competition Volume II, 2021	https://www.oecd.org/daf/competition/oecd- competition-trends-2021-vol2.pdf
Japan Fair Trade Commission, Online Retail Platform and App Store, 2019	<u>https://www.jftc.go.jp/en/pressreleases/yearl</u> <u>y-2019/October/191031Report.pdf</u>
Portuguese Autoridade Da Concorrência, Ecossistemas Digitais, Big Data e Algoritmos, 2019	https://www.concorrencia.pt/sites/default/fil es/Consulta%20ao%20mercado%20digital.p <u>df</u>
The Netherlands Authority for Consumer & Markets, Price Effects of Non-Brand Bidding Agreements in the Dutch Hotel Sector, 2019	https://www.acm.nl/sites/default/files/docu ments/2019-06/working-paper-acm-price- effects-of-search-advertisement- restrictions.pdf
Stigler Committee on Digital Platforms, Subcommittee on Market Structure and Antitrust Report, In: Stigler Committee on Digital Platforms Final Report, Stigler Center for the Study of the Economy and the State At Chicago Booth 23, 2019	<u>https://www.sipotra.it/wp-</u> <u>content/uploads/2020/02/Stigler-Committee-</u> <u>on-Digital-Platforms-Final-Report.pdf</u>
U.S. House of Representatives, 116th Cong., Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020	https://www.govinfo.gov/content/pkg/CPRT <u>-117HPRT47832/pdf/CPRT-</u> <u>117HPRT47832.pdf</u>
ICN, Unilateral Conduct Working Group. Report on the result of the ICN survey on dominance/substantial market power in digital markets, 2020	https://www.internationalcompetitionnetwo rk.org/wp-content/uploads/2020/07/UCWG- Report-on-dominance-in-digital-markets.pdf
U.S., Request for Information on Merger Enforcement, 2022	https://www.regulations.gov/document/FTC <u>-2022-0003-0001</u>
U.S. Subcommittee on Antitrust Commercial and Administrative Law of the Committee on the Judiciary. Investigation of Competition in Digital Markets. Majority Staff Report and Recommendations, 2020	https://www.govinfo.gov/content/pkg/CPRT <u>-117HPRT47832/pdf/CPRT-</u> <u>117HPRT47832.pdf</u>
ICN, MWG Webinar on Control of Data, Market Power and Potential Competition in Merger Reviews, 2022	<u>https://www.youtube.com/watch?v=PY8zO</u> <u>UGuDIU</u>

<u>Report</u>	Link ⁴
OECD, Ex Ante Regulation and Competition in Digital Markets, 2021	https://www.oecd.org/daf/competition/ex- ante-regulation-and-competition-in-digital- <u>markets-2021.pdf</u>
Belgian Competition Authority, Authority for Consumers & Markets, Conseil de la Concurrence, Joint memorandum on challenges faced by competition authorities in a digital world, 2019	https://www.belgiancompetition.be/sites/def ault/files/content/download/files/bma_acm_ cdlcl.joint_memorandum_191002.pdf
Fiscalía Nacional Económica, Horizontal Merger Guidelines, 2022	<u>https://www.fne.gob.cl/wp-</u> <u>content/uploads/2022/05/20220531Guia-</u> <u>para-el-Analisis-de-Operaciones-de-</u> <u>Concentracion-Horizontales-version-final-</u> <u>en-ingles.pdf</u>
OECD, Market definition in multi-sided markets - Note by Sebastian Wismer & Arno Rasek, 2017	https://www.oecd.org/officialdocuments/pu blicdisplaydocumentpdf/?cote=DAF/COMP/ WD%282017%2933/FINAL&docLanguage=E <u>m</u>
Competition Bur. Canada, Competition Bureau statement regarding Thoma Bravo's acquisition of Aucerna, 2019	https://ised-isde.canada.ca/site/competition- bureau-canada/en/how-we-foster- competition/education-and- outreach/position-statements/competition- bureau-statement-regarding-thoma-bravos- acquisition-aucerna
Competition Bur. Canada, Guide to the 2022 amendments to the Competition Act, 2022	https://ised-isde.canada.ca/site/competition- bureau-canada/en/how-we-foster- competition/education-and- outreach/publications/guide-2022- amendments-competition-act
Competition Bur. Canada, Examining the Canadian Competition Act in the Digital Era, 2022	https://ised-isde.canada.ca/site/competition- bureau-canada/en/how-we-foster- competition/promotion-and- advocacy/regulatory-adviceinterventions- competition-bureau/examining-canadian- competition-act-digital-era
OECD, Portfolio Effects in Conglomerate Mergers, 2002 ⁵	https://www.oecd.org/daf/competition/18182 <u>37.pdf</u>

⁵ It is important to notice that since the publication of the former report in 2018 (*Big data and innovation: key themes for competition policy in Canada*) there has been at least one amendment to the Canadian Competition Act relating to merger notification criteria and a stricter view for digital markets. For example, a recent amendment added a provision to ensure that the mandatory merger notification requirements will apply to transactions that have been designed to avoid notification (section 113.1). This specific amendment had been recommended by the Bureau in 2022, as part of the Bureau's series of recommendations related to the Canadian Competition Act in the Digital Era.

Report	<u>Link⁴</u>
OECD, Some Economics of Digital Ecosystems –	https://one.oecd.org/document/DAF/COMP/
Note by Marc Bourreau, 2020	WD(2020)89/en/pdf
OECD, Vertical Mergers in the Technology, Media, and Telecom Sector: Background Note by the Secretariat, 2019	https://one.oecd.org/document/DAF/COMP(2019)5/en/pdf
OECD, Data-Driven Innovation: Big Data for	https://www.oecd.org/sti/data-driven-
Growth and Well-Being, 2015	innovation-9789264229358-en.htm

II) INTRODUCTION

4. Digital services have brought relevant and innovative benefits to users and contributed to internal markets opening new business opportunities and facilitating crossborder trade⁶. Nowadays, digital services cover a variety of daily activities, including online intermediation services, such as marketplaces, social media, search engines, system operations, and application software stores.

5. However, several digital companies wield significant economic and social power. The International Competition Network (ICN), for example, has demonstrated the relevance of digital markets in the document "Report on the results of the ICN survey on dominance/substantial market power in digital markets"⁷. The paper showed that, to assess market power in digital markets, competition agencies analysed the specificities of these markets as well as the combined analysis of entry barriers (including data possession/access) and data control.

6. The emergence of large platforms has been boosted by intrinsic characteristics of that sector such as strong network effects, often embedded in the ecosystems of their platforms. These platforms represent key structuring elements of today's digital economy, intermediating most transactions between end-users and business users. This quick, dynamic, and novel type of economy may bring about different issues on data control, market power, and potential competition; thus, competition authorities need the proper tools to address these new markets.

III) CHARACTERISTICS OF DIGITAL MARKETS

A) DIGITAL MARKETS OVERVIEW

7. As stated by the OECD⁸ and by the European Commission's proposal for a Digital Markets Act⁹, the digital sector has remodelled competitive dynamics, creating new markets and modifying existing ones. Competition authorities have had to start facing the

⁶ As the European Commission mentions in its response: "Whilst digitalisation has brought many benefits and holds the promise of still significant larger benefits in the future, a few large platforms have become gatekeepers for many digital products and services".

⁷ ICN, Unilateral Conduct Working Group. Report on the result of the ICN survey on dominance/substantial market power in digital markets, 2020, p. 4.

⁸ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 13.

⁹ "Digital services have brought important innovative benefits for users and contributed to the internal market by opening new business opportunities and facilitating cross-border trading". (European Commission, Digital Market Act, 2020, p. 2).

uncertainties of rapidly growing markets, whose limits are not well defined, new types of potential anticompetitive practices, and other behaviours that raised concerns (such as mergers and acquisitions).

8. As recognized by several authorities, the development of the digital economy¹⁰ has substantially changed social relations. Economic transactions are faster and more dynamic. The information flow between individuals and organisations in a more transparent way¹¹ and the monitoring of global events can happen almost instantaneously. There is now an easier and more direct access of consumers to suppliers and a better interaction between them¹².

9. Besides enabling the creation of new products and services, digital markets allowed for a better network of market players, products at lower prices, innovative business models¹³⁻ ¹⁴ economic growth, productivity rise, diminished cost of transactions, amongst others¹⁵. As digital players have a greater capacity to collect data, it facilitates the development of personalised products¹⁶, enhancing efficiency and consumer welfare¹⁷.

10. In short, the digital economy has brought many benefits, significantly affecting business relations. Thus, as some reports observe¹⁸, digital markets increased competition

¹⁰ As the OECD points out: *"The Digital Economy incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data. It refers to all producers and consumers, including government, that are utilizing these digital inputs in their economic activities"*. (OECD, A Roadmap Toward a Common Framework for Measuring the Digital Economy: Report for the G20 Digital Economy Task Force, 2020, p. 5)

¹¹ According to the French and German competition authorities, one of the main benefits of digital markets is the transparency related to the price and quality of products, which raises competition amongst market players. (Autorité De La Concurrence & Bundeskartellamt, Competition Law and Data, 2016, p. 14)

¹² As stated by COFECE in Rethinking Competition in the Digital Economy, 2018, pp. 35–36.

¹³ According to CADE, the most common business models are (a) the subscription model, which involves two parties (the supplier and the paying user); (b) the advertising model, in which users do not usually pay for the provided services since the websites indirectly profit from ads and sale of information that increase advertising effectiveness; (c) the open access model, in which the platform connects suppliers to users, whether incurring subsequent costs or not. (CADE. Cadernos do CADE: Mercados de Plataformas Digitais, p. 15)

¹⁴ "Disruptive innovations have the potential to drastically alter markets and their functioning. They not only involve a new product or process but can also involve the emergence of a new business model". (OECD, Executive Summary of the Competition Committee Hearing on Disruptive Innovation, 2017, p. 2)

¹⁵ See Bundeskartellamt, Working Paper: Market Power of Platforms and Networks, 2016, p. 1; and Comisión Federal De Competencia Económica, Rethinking Competition in the Digital Economy, 2018, p. 35.

¹⁶ "Access to a person's data or machine data is often essential to offer him or her a service. The importance of individual-level data, including historical data and data about a large number of individuals or machines, further increases with the personalisation of services and the use of AI. A music platform can, for example produce a better personalised experience for a user if it has data about his or her past behaviour and that of (a lot of) other users." (European Commission, Competition Policy for the Digital Era, 2019, p. 28).

¹⁷ According to the Portuguese Report, 2019, p. 7.

¹⁸ According to the Australian competition authority, the development of the digital economy gave rise to a scenario in which traditional firms would have to compete with digital businesses—which have the ability to

amongst players and improved product customisation and consumer targeting. Although it benefits consumers, digital markets have also posed considerable challenges to competition authorities and encouraged the creation of anticompetitive violations hitherto unknown to authorities¹⁹.

11. Another aspect that caught the attention of authorities was the explosive inorganic growth of some digital companies. Faced with mergers in digital markets, competition authorities had to grapple with a new and different reality. This has given rise to competition concerns and a debate over the need for new tools to review these mergers and address this new type of economy. Hence, briefly introducing the main particularities of digital markets seems relevant to better understand the sector.

12. The first relevant aspect of those markets is companies' **massive accumulation of data**²⁰, i.e., big data, which may be defined as "the use of large-scale computing power and technologically advanced software in order to collect, process and analyse data characterised by a large volume, velocity, variety and value. (...) The ability to generate and process large datasets can nevertheless be associated with market power, as a result of economies of scale, economies of scope and network effects, as well as real-time data feedback loops²¹".

13. Another common feature of those markets is that market players operate in several supply chain links at the same time, i.e., in markets that are vertical, complementary, or diagonal to the original one. The expansion of players to correlated markets has given rise to **digital ecosystems or digital conglomerates**²².

14. It is also relevant to mention the possibility of companies reaching a scale without owning tangible assets, that is, a **scale without mass**²³. Contrary to many traditional markets,

allocate assets more efficiently and better collect and process data. (Australian Competition and Consumer Commission, Digital Platforms Inquiry–Final Report, 2019, p. 48)

¹⁹ For further information, see the ICN Unilateral Conduct Working Group Report on the result of the ICN survey on dominance/substantial market power in digital markets, 2020.

²⁰ For further information, see: OECD, Executive Summary of the Competition Committee Roundtable on Big Data, 2016, p. 2; and Autoridade de Concorrência, Ecossistemas Digitais, Big Data e Algoritmos, 2021.

²¹ "Feedback loops in digital markets are self-reinforcing processes in which a change to the conditions on one side of the market is amplified due to data collection or network effects. For example, if an online platform uses data generated by its users' activities to improve its service, it will be able to increase consumer value and thus demand. It may also sell data to third parties, or use it to target advertisers better, thus improving its revenues. Because these revenues can be invested in further improvements in service quality, demand may rise even further. Thus, an initial user base can generate a self-reinforcing cycle of improvements that cause the user base to increase further, continuing the cycle. This cycle is one of the reasons why concentration may be higher in digital platform markets." (OECD, Big data: Bringing Competition Policy to the Digital Era, 2016, p. 10)

²² See: Autoridade da Concorrência, Ecossistemas Digitais, Big Data e Algoritmos, 2019; and OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020.

²³ See: CADE, Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 12.

digital companies can grow faster and at a lower cost. In this case, the costs related to data processing, storage, replication, and transmission are low compared to cost in traditional markets²⁴.

15. Also, digital markets have a global reach, relevant network effects²⁵, and economies of scale²⁶ and scope²⁷. They develop faster and more dynamically through intense disruptive innovations, what calls for a vigilant oversight from and continuous learning by authorities²⁸.

16. The characteristics mentioned above are likely to promote market concentration and reinforce dominant positions, facilitating the development of monopolistic or oligopolistic markets (known as "winner-takes-all" or "winner-takes-most" markets). These markets are said to be characterized for having high network effects and switching costs, as well as significant economies of scale and scope²⁹. Positive network effects and economies of scope and scale, particularly where the first-mover advantage and the switching costs are

²⁴ Based on CADE Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, p. 12.

²⁵ "Digital markets tend to be characterized by strong network effects, making them prone to concentration and monopolization. There are two types of network effects: direct and indirect. In markets with direct network effects, the more people who use a product or service, the more valuable that product or service becomes to other users. By contrast, indirect network effects arise when greater use of a product or service forms a new type of standard and increases the incentive for third parties to invest in developing compatible technologies, which in turn reinforces the popularity of the original product or service with users. Strong network effects serve as a powerful barrier to entry for new firms to enter a market and displace the incumbent. When combined with other entry barriers such as restrictions on consumers or businesses easily switching services, network effects all but ensure not just market concentration but durable market power" (ICN, Unilateral Conduct Working Group, 2019, pp. 39-41).

In this regard, the OECD also stresses: "Network effects refer to the gains enjoyed by consumers of a product when more consumers use that product. For example, users of a social network experience a benefit, or positive externality, as more of their acquaintances set up accounts on the network. Network effects can occur within a given side of a platform, or between different sides (see cross-platform network effects). [...] Cross-platform network effects (or network externalities) occur when the participation of users on at least one side of a platform generates network externalities on another side of the platform." (OECD, Consumer Data Rights and Competition: Background note by the Secretariat, 2020).

²⁶ For further information, see ICN, Unilateral Conduct Working Group, 2020, p. 45.

²⁷ Some platforms benefit from economies of scope due to one or more services complementing each other. In some cases, costs and/or developing data can be shared between lines of businesses. Moreover, the applications can have similar appearance and behaviour so that the users get used to the platforms faster, which can make it easier for new platforms to obtain success faster, giving them a competitive advantage. In addition, offering more services is a way to keep the user connected to the firm, meaning that the firm have more opportunities to collect user data to better the services of the platforms. (CADE. Cadernos do CADE: Mercados de Plataformas Digitais, 2020, pp. 12–13)

²⁸ For further information, see ICN, Unilateral Conduct Working Group, 2019, p. 4.

²⁹ As explained by the Chilean authority in Case docket number FNE F217-2019: La evolución de los mercados en que participan es incierta y difícil de predecir. Esto, debido a las innovaciones disruptivas que, en ciertos casos, pueden dar lugar a mercados en que el innovador adquiere gran parte o la totalidad de los mismos ("winner-takes-all markets"), lo que depende de la presencia de economías de escala, efectos de red, costos de cambio y nivel de multi-homing de los usuarios, y de las posibilidades de diferenciación de los servicios".

considerable, may hinder competition in consolidating market position of players that helped developing the market³⁰.

17. It is true that some traditional markets also have such characteristics. However, as these features are jointly more present in digital markets³¹, they end up raising considerable concerns.

18. In addition to establishing concentrated markets, those characteristics offer incentives to adopt unilateral conducts that are harmful to competition, as discussed in the Furman Report³², such as:

- (i) Collecting excessive private data, violating consumer privacy³³, and increasing the number of ads beyond what is found in competitive markets;
- (ii) Charging excessive prices to access platforms, charging intermediation fees, or imposing unjust contractual terms on consumers or businesses that rely on the platforms to access consumers;
- (iii) Leveraging the control over rankings, reputational instruments, or similar mechanisms to harm competitors; and
- (iv) Removing potential competitors from markets through acquisitions or other exclusionary behavior.

19. In sum, digital markets have characteristics that raise significant competition concerns, whether due to potential new anticompetitive conducts or the current challenges authorities face in investigating mergers and acquisitions in this sector.

20. Before describing such challenges, we must stress the importance of data in the digital world.

B) THE IMPORTANCE OF DATA FOR DIGITAL MARKETS

21. As the JFTC puts it, the use and handling of data by digital companies are to become a central point in technology discussions in several economic sectors³⁴. The possibility of

³⁰ CADE, Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 14; OECD, The Evolving Concept of Market Power in the Digital Economy, 2022.

³¹ As mentioned by CADE at ICN MWG – Digital Mergers – Webinar 1: Market Definition.

³² The bullet points summarize the key points of the Digitial Competition Expert Panel. Digital Competition Expert Panel, Unlocking Digital Competition: Report of The Digital Competition Expert Panel, 2019, pp. 42-45.

³³ Depending on how, this practice may also be considered as illegal.

³⁴ See: Japan Fair Trade Commission, Competition Policy Research Center, Report of Study Group on Data and Competition Policy, 2017, p. 2

digital firms collecting and processing instantly a considerable amount of data changed reality drastically, affected competition, and evidenced issues related to consumer privacy³⁵. Although operating firms in digital markets may not be the only players that collect and process data, they may be best positioned to use it to attract and keep users³⁶.

22. To illustrate data relevance to the digital economy, we can consider the following hypothesis. For decades, traditional companies operating in the audiovisual industry used demographic data to sell audio/music products. In these cases, companies would analyse consumer tendencies and preferences based on demographic analyses, surveying music reproduction in radio stations or audio products more likely to sell. Nowadays, with the digital economy, streaming platforms find the main preferences of users based on their most listened-to music genres, amongst other metrics. Thus, platforms immediately show new music and new genres compatible with users' behavioral patterns. In other words, based on collected and processed data from each individual user, the platforms can personalise their offerings according to that user's preference, aiming to keep the user on that platform for as long as possible³⁷.

23. We may conclude that the ability to accumulate and process a significant amount of data in specific markets can be seen as a competitive advantage. A large amount of data can be collected and processed. Thus, it is crucial to differentiate the types of data and their implications to competition, considering data heterogeneity, dimensions, use, access conditions, types, level, etc³⁸.

³⁵ See: Autorité De La Concurrence and Bundeskartellamt, Competition Law and Data, 2016, pp. 24-25; U.S. House Of Representatives, Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020, p. 51.

³⁶ See: OECD, An Introduction to Online Platforms and Their Role in the Digital Transformation, 2019; and CADE, Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 14

³⁷ As the European Commission states in Case M.8788 – Apple/Shazam: (66) In the past, in order to gather similar data and generate useful insights, the music industry relied primarily on more traditional sources of information, such as physical sales data and how often songs were played on the radio. Today, with the transformation brought by digitization, there are more players active at different levels of the music industry value chain and more data is available. In fact, the industry can rely on more precise information not only on what people are listening to, but also on where, when and through which device they are listening to it.

³⁸ See: European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p.73.

Other authorities such as those from the United Kingdom, Belgium, Turkey, Sweden, Spain, and Mexico also support this view.

24. Data can be given voluntarily by a data subject or it may be inferred by the platform using artificial intelligence. Therefore, the World Economic Forum defines³⁹ individual-level data as (i) volunteered, (ii) observed, and (iii) inferred⁴⁰.

25. Similarly, according to a report for the European Commission⁴¹, some data is **volunteered** and intentionally contributed by the user of a product. For example, the name, email, image/video, calendar information, review, or a post on social media would qualify as volunteered data. Also, more structured data directly generated by an individual, like a movie rating, or liking a song or post are also volunteered data. Some data is **observed**. In the modern era, many activities leave a digital trace, and "observed data" refers to more behavioral data obtained automatically from a user's or a machine's activity. The movement of individuals is traced by their mobile phone; telematic data records the roads taken by a vehicle and the behavior of its driver; every click on a page web can be logged by the website and third-party software monitors the way in which its visitors are behaving. Finally, some data is **inferred**, and obtained by transforming in a non-trivial manner volunteered and/or observed data while still related to a specific individual or machine. This will include a shopper's or music fan's profiles, and other categories resulting from clustering algorithms or predictions about a person's propensity to buy a product, or credit ratings.

26. If, on the one hand, different types of data can raise different competition concerns, on the other hand, this same issue allows a platform to supply consumers with higher quality, more personalized products. In advertising, for instance, collecting and processing different types of data—and its combination with other platforms' data, whether part of the same ecosystem— can enable the development of specific and targeted products⁴².

27. In addition to providing customized products based on personal information, such as the individual preferences of a given consumer, broad data collection allows digital companies to improve their products in general. Thus, the algorithms firms develop to collect and process data are essential for having data based on inference and preference of consumers⁴³.

28. This use and accumulation of data creates a feedback loop: a mutual positive reinforcement system in which access to more data allows, for example, for improved

³⁹ World Economic Forum, Personal Data: The Emergence of a New Asset Class, 2011.

⁴⁰ For data categorisation, see: Ibid, pp. 24-25 and Autorité De La Concurrence & Bundeskartellamt, Competition Law and Data, 2016, pp. 6-7.

⁴¹ See: Competition Policy for the Digital Era, 2019, pp. 24-27.

⁴² Autorité De La Concurrence, Publicité En Ligne : La Constitution D'un Écosystème En Forte Croissance Et Tiré Par Deux Acteurs, 2018, p. 42.

⁴³ Autorité De La Concurrence & Bundeskartellamt, Competition Law and Data, 2016, p. 31.

personalisation of goods and services, convincing consumers to spend more time within a platform. The increase in demand by users restarts the positive reinforcement cycle, which enables the company to collect more data, both individual and inferred data, consequently improving their products, further capturing consumers' attention inside the digital ecosystem or application⁴⁴. As the House Majority Report points out, data-rich accumulation is self-reinforcing⁴⁵.

29. Against this backdrop—and considering dynamic economies of scale—firms with broader databases and greater capacity to process data personalise their products at a lower cost than their rivals⁴⁶. Once a platform is able to offer more personalised products, users will value said supplier more and demand more of its functionalities.

30. In these markets, the more data is available about a certain individual and group of individuals, the better the user experience within a platform, i.e. a more customised experience. The better the consumer experience, the more consumers will be attracted to the platform, increasing its database and a possible supply of more personalised products.

31. The Stigler Report states that data has considerable relevance in some digital markets, mainly inferred and observed data. These datasets are not static—such as name and e-mail—but dynamic. They translate into specific, recent consumer preferences, which can regard consumers' buying interests, musical tastes, etc. These data may have a relevant economic value, encouraging companies to prevent or hinder data access to third parties⁴⁷.

32. Data has, then, a twofold effect. On one side, processing larger datasets may bring significant benefits to consumers. By contrast, data accumulation by players with market power can facilitate anticompetitive conducts and raise competition concerns, such as

⁴⁴ As mentioned in the following documents: Unlocking Digital Competition, Report Of The Digital Competition Expert Panel, 2019, p. 33-34; Special Advisers report, p. 29; Autorité De La Concurrence & Bundeskartellamt, Competition Law And Data, 2016, p. 29; Commission "Competition 4.0," German Fed. Ministry For Economic Affairs And Energy, A New Competition Framework For The Digital Economy, 2019, p. 14; U.S. House Of Representatives, 116th Cong., Report On Investigation Of Competition In Digital Markets: Majority Staff Report And Recommendations, 2020, p. 45,36.

⁴⁵ Ibid., p. 42, 43.

⁴⁶ Unilateral Conduct Working Group. Report on the result of the ICN survey on dominance/substantial market power in digital markets. 2020, p. 45; and CADE, Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 12.

⁴⁷ Stigler Committee on Digital Platforms, Subcommittee on Market Structure and Antitrust Report, In: Stigler Committee on Digital Platforms Final Report, Stigler Center for the Study of the Economy and the State At Chicago Booth 23, 2019, p. 41.

increased barriers to entry⁴⁸. Accordingly, a previous ICN⁴⁹ report found that one-third of queried competition agencies reviewed cases where data access or possession was regarded as a barrier to entry and, in about 65% of them, the accumulated data was decisive in defining data access as an entry barrier.

33. Another concern of data accumulation by dominating companies is the increase in switching costs a user may face when changing platforms⁵⁰. This is because the consumer may lose their database and history, possibly facing elevated switching costs on different occasions, for instance losing their purchase history or search history in a given social media platform. It seems that, without the means to exchange information without incurring costs to users, a company's data control can raise switching costs to consumers, who may lose the data they accrued while using the platform, discouraging them from changing platforms⁵¹.

34. To counter these concerns, authorities may seek measures to stimulate competition, lower barriers to entry (to promote as open a market as possible to new entrants), and secure existing rivalry, making competition derive from players' merit and the quality of their products. Many reports have addressed strategies authorities could employ to foster market

⁴⁸ Companies with superior access to data can use that data to better target users or improve product quality, drawing more users and, in turn, generating more data—an advantageous feedback loop. In short, new users and greater engagement bring in more data, which enables firms to improve user experiences and develop new products—in turn capturing more data. While data is non-rivalrous, meaning that one party's use does not prevent or diminish use by another, firms may nonetheless exclude rivals from using their data through technical restrictions and legal contracts. Additionally, a dominant platform can use its market power to extract more data from users, undermining their privacy. (U.S. Subcommittee on Antitrust Commercial and Administrative Law of the Committee on the Judiciary. Investigation of Competition in Digital Markets. Majority Staff Report and Recommendations, 2020, p. 42)

⁴⁹ ICN, Unilateral Conduct Working Group. Report on the result of the ICN survey on dominance/substantial market power in digital markets, 2020, p. 26-27.

⁵⁰ Autoridade Da Concorrencia, Ecossistemas Digitais, Big Data e Algoritmos, 2019, p. 31.

⁵¹ U.S. House of Representatives, 116th Cong., Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020, p. 42.

competition. The main ones are data portability⁵², interoperability⁵³, multi-homing⁵⁴ and other obligations that ensure data access⁵⁵.

35. According to the Majority Staff Report and Recommendations of the U.S House of Representatives "data portability is a remedy for high costs associated with leaving a dominant platform. These costs present another barrier to entry for competitors and a barrier to exit for consumers. Dominant platforms can maintain market power in part because consumers experience significant frictions when moving to a new product"⁵⁶. Similarly, as the OECD points out in its Handbook on Competition Policy in the Digital Age, "data portability measures aimed at promoting competition seek to reduce user switching costs and reduce the frictions associated with trying new services. This could, in turn, stimulate competition by making it easier for new entrants to attract users and potentially alleviate barriers to entry associated with data access, in those markets for which individual-level data is valuable"⁵⁷.

36. The CMA recommended in its Digital Advertising Market Study that the competition authority should have powers designed to tackle the root cause of market power, and where an adverse effect to competition is found, that it should have the ability to bring in more intrusive remedies, including data-access remedies ⁵⁸. The CMA considers that this measure would help with the scale advantages that the largest tech firms have as a result of their databases giving them a competitive advantage and would diminish barriers to entry⁵⁹.

⁵² "Data portability is the ability (sometimes described as a right) of a natural or legal person to request that a data holder transfer to the person, or to a specific third party, data concerning that person in a structured, commonly used and machine-readable format on an ad-hoc or continuous basis". (OECD, Mapping data portability initiatives, opportunities and challenges, 2021, p. 9);

[&]quot;Data portability: In line with recent EDPB guidelines we refer to data portability as the ability of the data subject or machine user to port his or her data from service A to service B. This portability right can be exercised directly by the user, e.g. by downloading a file from service A and uploading it to service B, or he or she can have a third party exercise it". (European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 83)

⁵³ "Digital markets have adopted a range of approaches with different degrees of open and closed ecosystems. As set out earlier in this section, open standards, and the interoperability they deliver, are widely recognized as delivering significant benefits. They enable firms to create applications that are able to work seamlessly with other applications based on the same standards. This also ensures that consumers aren't locked into products from one business". (Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel, 2019, p. 73)

⁵⁴ "Multi-homing refers to the ability of users to use multiple competing platforms at the same time. This contrasts with singlehoming, where consumers use only a single platform". (OECD, Practical approaches to assessing digital platform markets for competition law enforcement: Background note by the Secretariat for the Latin American and Caribbean Competition Forum, 2019, p. 10.)

⁵⁵ OECD, Ex Ante Regulation and Competition in Digital Markets, 2021, p.42.

⁵⁶ U.S. House of Representatives, 116th Cong., Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020, p. 55

⁵⁷ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 54.

⁵⁸ CMA, Online platforms and digital advertising – Market study final report, 2020, p. 5 and 365.

⁵⁹ The UK Government has introduced the Digital Markets, Competition and Consumers Bill (DMCC Bill), which was introduced to Parliament in April 2023 and is currently undergoing the legislative process. The DMCC Bill includes Chapter 4 on 'pro-competitive interventions' (PCI) which would grant the CMA powers to make a PCI in

37. Although data portability can be an appropriate remedy to the abuse of dominant position in several markets, its imposition also raises some concerns. As the OECD states, *"for standardization to be successful, it should be open and transparent, be well-designed, meet a genuine need, be licensable under Fair, Reasonable and Non-Discriminatory (FRAND) terms, and be implemented widely"⁶⁰. In this sense, despite it being effective, competition authorities⁶¹ should be careful in employing data portability, not doing it limitlessly⁶². Contrary to what one could expect, unlimited interoperability may have negative effects. Examples of such negative effects may include the possibility of price fixing and data investment deterrence and also risks of tacit collusion and other coordinated practices. All those effects may hinder innovation.*

38. Considering the answers obtained in the survey, competition authorities may need to assess the effects of platforms' accumulated data and the measures to be imposed on a case-by-case basis⁶³, considering the type, nature, use, amount, and potential of third parties reproducing the collected data⁶⁴.

39. Thus, to determine data portability, competition authorities may have to consider the processed data, its intent, perishability, use and other factors. Different types of data collected and processed calls for different antitrust strategies. Therefore, it is said that the authority

relation to a 'designated undertaking' where, following a PCI investigation, the CMA considers that (a) a factor or combination of factors relating to a relevant digital activity is having an adverse effect on competition, and (b) making the PCI would be likely to contribute to, or otherwise be of use for the purpose of remedying, mitigating, or preventing the adverse effect on competition. See chapter 4 of the DMCC Bill: Digital Markets, Competition and Consumers Bill.

⁶⁰ OECD, Handbook on Competition Policy in the Digital Age, 2022, p.20.

⁶¹ Special Advisor Report, P. 9.

⁶² In scenario, the OECD has mentioned that there are two risks related to data portability:

Issue 1 – Not enough data portability: Limitations to interoperability may also be the result of co-ordination among competitors in a market. Agreements to limit interoperability with new entrants can serve to reduce market contestability and protect incumbents.

Issue 2 – Too much data portability: However, limitations to portability and interoperability are not the only potential collusion risk – a high degree of data portability or interoperability in a market could also facilitate collusion among firms in a market. Interoperability, like all standard-setting processes, may disincentivize aggressive competition on the parameters covered by the standard, and may be used as cover for information exchange or otherwise facilitate collusion. Data portability may increase the risk of collusion due to a higher degree of transparency in a market. However, the degree to which this transparency is achieved will depend on the proportion of users that transfer their data. (OECD (2021), Data portability, interoperability and digital platform competition, OECD Competition Committee Discussion Paper).

⁶³ As stressed by Belgium, Chile, Colombia, the European Commission, Hungary, Japan, Kenya, Serbia, Spain, Slovenia, Sweden and Turkey.

⁶⁴ "Any discussion of access to data must take into account the heterogeneity of data, the amount of data collected, their use cases, and desired access conditions. It is necessary to distinguish between different forms of data, levels of data access, and use cases". Ibid, p. 73.

should only intervene in cases where there is a direct relationship between data restriction, market power and the maintenance of dominant position.

40. Besides raising unilateral conduct concerns, which would require investigating potential violations, accumulated data can raise issues related to merger control. As indicated by the House Majority Report⁶⁵, having a broad database allows dominant platforms to find rivals at initial stages of development and eliminate them from the market.

41. We further note that competition authorities⁶⁶ have conducted investigations and found several unnotified transactions in digital markets. The investigations revealed that a significant number of transactions were not reported because the acquired firms (targets) were, in its majority, start-ups with low turnover⁶⁷, indicating that there might be an enforcement gap⁶⁸.

IV) GENERAL CONSIDERATIONS REGARDING MERGER REVIEW IN DIGITAL MARKETS

42. As presented in an OECD report, there is a growing consensus on the necessity of "enhancing merger control regimes, including adjusting notification thresholds to capture anticompetitive acquisitions of emerging competitors, increasing the emphasis on innovation and dynamic competition issues, explicitly including digital-specific issues such as data access or intermediation power in merger legislation, and placing the burden of proof on merging parties to show the lack of competition harm in certain situations"^{69_70}.

43. Hence, the discussion centres on two matters: (i) changing or including new criteria for reporting mergers and acquisitions for proper identification of transactions in digital markets; and (ii) revising substantial assessment standards that include qualitative criteria.

A) MERGER NOTIFICATION CRITERIA

⁶⁵ "This significant data advantage also enables dominant platforms to identify and acquire rivals early in their lifecycle. Leading economists and antitrust experts have expressed concern that serial acquisitions of nascent competitors by large technology firms have stifled competition and innovation. This acquisition strategy exploits dominant firms' information advantages in order to acquire rapidly growing companies just before those companies become true threats. Lacking access to this same information or failing to appreciate its significance, enforcers may fail to identify these acquisitions as anticompetitive. This is more likely when the dominant platform buys a nascent threat before it has fully developed into a rival". (U.S, Subcommittee on Antitrust Commercial and Administrative Law of the Committee on the Judiciary. Investigation of Competition in Digital Markets. Majority Staff Report and Recommendations, 2021, p.44)

⁶⁶ Amongst which, Brazil and the United States.

⁶⁷ Ibid, p.44.

⁶⁸ This matter will be analyzed later on this Report.

⁶⁹ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 64.

⁷⁰ See also: Joint memorandum of the Belgian, Dutch and Luxembourg competition authorities on challenges faced by competition authorities in a digital world (2019).

44. Regarding the first topic, several authorities debated the possibility of establishing new notification criteria for reporting a merger or changing the existing ones for proper identification of transactions in digital markets.

45. The discussion also results from the finding that, in part, certain digital conglomerates have consolidated their dominant position inorganically. Several authorities are alert to this fact since some digital conglomerates started acquiring many new companies in the market without a significant turnover. Consequently, and given that most countries⁷¹ that impose a pre-merger notification rule set a threshold based on turnover, acquiring players with low turnover allows the transactions to scape competition authorities' probe.

46. According to Furman's report, from 2008 to 2018, firms such as Amazon, Apple, Facebook, Google, and Microsoft have carried out over 400 merger and acquisition transactions, of which only a low quantity was notified to the competent authorities⁷². LEAR's report, in turn, points out that Google, Amazon and Facebook acquired more than 299 companies from 2008 to 2018⁷³.

47. Similarly, the Brazilian competition authority started monitoring the market to ascertain the number of transactions some companies made within the last ten years⁷⁴. Although still in course, the procedure has already detected more than 300 unreported transactions. Thus, CADE found⁷⁵ a possible need to discuss further the parameters for digital markets merger notification. In this regard, the authority assessed that a firm in the online delivery sector acquired several rivals between 2014 and 2020 and none of those transactions met the thresholds for mandatory merger notification.

48. Similarlly, the US FTC staff studied 616 unreported acquisitions by the five largest technology platform companies (by market capitalization) between January 1, 2010, and December 31, 2019, finding a significant number of acquisitions of start-ups, patent portfolios, and entire teams of technologists that were not required to be reported ex ante to the U.S. competition authorities. Key findings highlight the large number of transactions that were not

⁷¹ As pointed by the surveyed authorities.

⁷² Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel, 2019, p. 10 and 91.

⁷³ Lear, Ex-Post Assessment of Merger Control Decisions in Digital Markets - Final Report, 2019, p. 9

⁷⁴ Market monitoring case no. 08700.002785/2020-21.

⁷⁵ CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 114.

reported in advance to the competition agencies, and the significant portion of transactions that involved firms that were less than five years old at the time they were acquired⁷⁶.

49. Due to this complex reality imposed by the digital economy, several proposals for changing notification criteria have been made. The House Majority Report⁷⁷ proposes that dominant platforms be obliged to notify every transaction, regardless of any additional criterion. In the United Kingdom, in a similar way, companies in digital markets may need to report transactions they make⁷⁸. Stigler Report⁷⁹, for instance, suggests establishing a regulatory body to analyse all the transactions of companies with bottleneck power.

50. In March 2021, the European Commission published a Staff Working Document that summarized the findings of the evaluation of procedural and jurisdictional aspects of EU merger control launched in 201680. The evaluation aimed at, amongst other things, understanding whether the EU turnover-based thresholds may have resulted in an enforcement gap. The evaluation results showed that a small number of transactions, which could have impacted competition in the internal market, have escaped merger control review at both EU and national level. To address this matter, the European Commission has decided to make use of its powers under Article 22 of the EU Merger Regulation and to accept, in certain circumstances, the referral of cases where the referring Member State does not have initial jurisdiction, as explained in the March 2021 Guidance on Article 22 of the EU Merger Regulation⁸¹. This guidance aims, *inter alia*, at providing the Commission the opportunity to assess transactions, in particular those for which at least one of the parties' turnover does not reflect its actual or future competitive potential. Paragraph 19 of the guidance highlights the Commission's focus by providing an illustrative non-exhaustive list of relevant criteria, which includes for example the referral of acquisitions of start-ups with significant competitive potential or important innovators.

⁷⁶ For additional information please see: https://www.ftc.gov/news-events/news/press-releases/2021/09/ftc-staff-presents-report-nearly-decade-unreported-acquisitions-biggest-technology-companies

⁷⁷ U.S. House of Representatives, 116th Cong., Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020, p. 388-396.

⁷⁸ Chapter 5 of the DMCC Bill would require that a 'relevant person' must report an event (a 'reportable event') to the CMA before the event takes place and that 'relevant person' means a 'designated undertaking', which has been designated as having 'strategic market status' in respect of digital activity carried out by the undertaking. See Chapter 2 of the DMCC Bill: Digital Markets, Competition and Consumers Bill (parliament.uk).

⁷⁹ Stigler Committee on Digital Platforms, Subcommittee on Market Structure and Antitrust Report, In: Stigler Committee on Digital Platforms Final Report, Stigler Center for the Study of the Economy and the State At Chicago Booth 23, 2019, P. 95.

⁸⁰ See: https://ec.europa.eu/competition/consultations/2021_merger_control/SWD_findings_of_evaluation.pdf. See https://ec.europa.eu/competition/consultations/2021_merger_control/SWD_findings_of_evaluation.pdf.

⁸¹ https://ec.europa.eu/competition/consultations/2021_merger_control/guidance_article_22_referrals.pdf; see also the Q&A document published in December 2022: https://competition-policy.ec.europa.eu/system/files/2022-12/article22_recalibrated_approach_QandA.pdf

51. Under Article 14 (1) of the EU's Digital Markets Act⁸² designated gatekeepers need to inform the Commission "of any intended concentration [...] where the merging entities or the target of concentration provide core platform services or any other services in the digital sector or enable the collection of data". This information requirement has no impact on the jurisdictional thresholds that are used to determine whether the Commission has jurisdiction and the information does not constitute a merger notification. However, it can inform an invitation by the Commission to Member States to make an Article 22 EUMR referral request.

52. Other jurisdictions⁸³ adopted more objective measures to change merger notification criteria.

53. Germany and Austria⁸⁴ recently adopted a new notification criterion, based on additional transaction value thresholds^{85 86}. Kenya, in turn, adopted a criterion based on assets⁸⁷. South Africa, for example, updated its Small Merger Guidelines to specifically capture digital mergers where there has been *"chronic underenforcement due to turnover/assets based thresholds for notification"*.

⁸² "A gatekeeper shall inform the Commission of any intended concentration within the meaning of Article 3 of Regulation (EC) No 139/2004, where the merging entities or the target of concentration provide core platform services or any other services in the digital sector or enable the collection of data, irrespective of whether it is notifiable to the Commission under that Regulation or to a competent national competition authority under national merger rules.

⁸³ "The mandatory notification systems are established in most of the surveyed jurisdictions" (OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 64). "In a similar way, the OECD Competition Trends indicates that 80% of consulted jurisdictions have a mandatory pre-merger notification system, and 95% of these jurisdictions use turnover as a criteria for establishing merger notification thresholds. However, some authorities, such as Australia, New Zealand and the United Kingdom have adopted voluntary notification systems. Regarding the notification criteria, the report surveyed 55 jurisdictions and noted that 52 use turnover, 15 assets, 9 market share and 5 transaction value as the criteria for determining merger notification thresholds". (OECD, Global Merger Control, Competition Trends, OECD Competition Volume II, 2021, p. 54)

⁸⁴ Bundeskartellamt, "Amendment of the German Act against Restraints of Competition". Available at <https://w ww.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2021/19_01_2021_GWB%20Novelle.html >.

⁸⁵ Bundeskartellamt and Bundeswettbewerbsbehörde, "Guidance on Transaction Value Threshold for Mandatory Pre-merger Notification". Available at < https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Leitfaden /Leitfaden_Transaktionswertschwelle.html >.

⁸⁶ The 9th amendment to the German Competition Act introduced an additional threshold based on the transaction value in order to control acquisitions of companies with low turnover but high competitive potential. The Tenth Amendment introduced further modifications not specifically related to digital markets, including a provision designed to order by formal decision that an undertaking has to notify every future concentration below the usual thresholds in one or several specific sectors of the economy after a sector inquiry (and after certain preconditions are fulfilled).

⁸⁷ KENYA: "In 2019, the Authority introduced assets as part of the thresholds. Before then, the assets were considered in lieu of turnover. This helped to capture mergers in the asset-intensive-industry likely to give rise to competition concerns and subsequently effectively remedy them after subjection to in-depth merger full assessment."

54. Authorities, such as those from the United Kingdom⁸⁸, Spain, Portugal, and Taiwan, stressed in their survey answers they use share-based tests alongside the turnover criterion. In Bulgaria, for example, according to the Bulgarian competition law (LPC), one of the involved companies fulfilling the turnover criterion may be sufficient for undergoing the merger review, if it concerns the acquired company⁸⁹. As a consequence of the second alternative component in the jurisdictional threshold (turnover of the target), situations may arise where the threshold is passed and the notification obligation is triggered by reason of the target's turnover alone, even though the acquirer may have had no or very little turnover in Bulgaria during the preceding financial year. That is, in case of an acquisition of joint control, if the acquiring parties fulfil the turnover thresholds, this is sufficient for undergoing the merger review.

55. It is important to take into consideration that it might be hard in some cases to establish a parameter based on the value of the transaction at the time it occurs, as payments may be done in installments and other variables. The German and Austrian Competition Authoritiy, thus, describe in their joint guidance on transaction value thresholds that the consideration for the transaction "encompasses all assets and other monetary benefits that the seller receives from the buyer in connection with the merger in question"⁹⁰ Besides, lowering thresholds could lead to an additional administrative burden that would be resource-intensive and impose additional costs to markets. Additional costs would be unjustifiable given that lower thresholds may not be able to identify transactions that are relevant to anitrust policy. On the other hand, after the threshold changes implemented by Germany and Austria some of the notified transactions based on said parameter raised serious competition concerns (e.g. Booking/eTraveli and Adobe/Figma, that were referred to the European Commission).

56. We observe a lack of consensus about changing pre-closing notification criteria. But a possible usually mentioned alternative is employing ex-post rules for assessing these mergers or rules that permit self-initiation of investigations of transactions below thresholds, through

⁸⁸ In the United Kingdom, when determining if there is a relevant merger situation, the CMA considers whether either the turnover test or the share of supply test is met. See paragraph 4.3 of the <u>Guidance on the CMA's</u> jurisdiction and procedure.

⁸⁹ The thresholds for mandatory notification under Art. 24, para 1 of LPC are as follows:

the combined aggregate annual turnover of all the undertakings participating in the concentration in the territory of Bulgaria during the preceding financial year exceeding BGN 25 million; and

either:

⁻ the aggregate annual turnover of each of at least two of the participating undertakings in the concentration in the territory of Bulgaria during the preceding financial year exceeding BGN 3 million; or

⁻ the aggregate annual turnover in the territory of Bulgaria during the preceding financial year of the undertakings subject to acquisition exceeding BGN 3 million.

⁹⁰ Bundeskartellamt and Bundeswettbewerbsbehörde, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), 2022, p. 3).

which authorities may require notification of specific transactions, even if they did not reach the merger thresholds established by respective laws ⁹¹.

57. This approach has been regarded relevant to learn from previous cases in digital markets as the sector develops and several surveyed authorities with pre-closing notification regimes consider ex-post notification a possibility.

58. In analysing more flexible systems, the OECD⁹² stressed they are adequate to address transactions in the digital sector⁹³.

B) SUBSTANTIAL CRITERIA FOR MERGER REVIEW

59. The second discussed topic focuses on review standards for transactions in digital markets and the use of new tools for analysis⁹⁴.

60. According to the European Commission⁹⁵, merger control plays a central role in the digital economy. The same legal standard applies in EU merger control regardless of the industry at stake. When assessing the impact of a concentration on competition, the European Commission reviews the competitive dynamics in each individual case and for each relevant market. The applicable standard for the European Commission's substantive assessment remains fit for purpose, as evidenced by the decisional practice. The Commission indeed intervened in relation to cases including for instance the acquisition of a particularly innovative player (for instance in *Meta / Kustomer*) or of the best placed potential entrant (for

⁹¹ For example, in Brazil and according to article 88, §7, the Brazilian competition authority may, within one (1) year as of the respective date of fulfillment, require the submission of the concentration acts that do not fall within the provisions of the article. Also, the Competition Commission South Africa in the Google/Fitbit case requested notification even though it did not meet the notification threshold. Many jurisdictions seem to have debates on this point and are trying to find a way to prevent mergers from being implemented without notification. CCSA also revised its Small Merger Guidelines and introduced voluntary notification for digital mergers, especially those whose transaction values are at least equivalent to the merger (Turnover/Assets) thresholds.

⁹² "Greater flexibility, additional transaction value screens, and the possibility of ex-post review each appear to be working well and are therefore worth exploring where agencies are concerned that anticompetitive mergers might be being missed" (OECD, Start-ups, Killer Acquisitions and Merger Control, 2020, p.43). Also, OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 64.

⁹³ To mention, Brazil, Canada, Hungary, Ireland, Norway, the United States, the United Kingdom, Japan, Sweden, and Lithuania. France is evaluating the possibility of adopting a similar system.

⁹⁴ Authorities and independent reports have suggested several means to inhibit anticompetitive practices by dominant platforms. To mention, (i) abandoning the consumer welfare standard; (ii) increasing the use of interim measures; (iii) making changes in burdens of proof; (iv) non-discriminatory/fair treatment obligations; (v) data portability and interoperability; (vi) reviewing merger notification thresholds and standards of proof; and (vii) having new regulators for digital markets". CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 110.

⁹⁵ European Commission - Commission Staff Working Document evaluation of procedural and jurisdictional aspects of EU merger control. p. 2.

instance in *Johnson & Johnson/Tachosil*, in the medical sector). In addition, *Booking/eTraveli* marks the Commission's first prohibition based on ecosystem concerns. The Commission found that that transaction would have strengthened Booking's dominant position, hindering further the ability of competitors to enter or expand in the hotel OTA market and entrenching Booking's travel ecosystem.

61. As already noted, there were many suggestions for more stringent merger control in digital markets in several reports⁹⁶. The aim is to prevent transactions that can negatively harm competition. Some reports have already suggested defining a rebuttable presumption to tighten merger review in digital markets. Rebuttable presumptions include changing the burden of proof and adjudicating beforehand the likelihood of the transactions of dominant digital companies being anticompetitive⁹⁷.

62. Another discussion is whether authorities should impose a more rigorous assessment of the efficiencies resulting from a transaction, as well as forcing companies to more clearly disclose how those efficiency would be shared with consumers⁹⁸. In this scenario, authorities would no longer be obliged to evince a transaction's potential damage, but rather the parties would have to prove its advantages⁹⁹. Other reports¹⁰⁰ also indicate the need to adopt a severe intervening position for mergers in the digital market, reinforcing strict review criteria and hindering dominant businesses' acquisition of digital players.

⁹⁶ To illustrate, LEAR recommends that authorities consider (i) using inspections/on-premises investigations to ensure that parties supplied all the relevant/correct information; (ii) use the value of the transaction as a proxy of the need to evaluate a transaction in detail; (iii) better understand the competitive conditions in key-sectors, such as online advertisement; (iv) extend the timeframe under which a company is considered to be a potential competitor beyond the two years usually employed in merger review; and (v) accept lower standards of proof and use qualitative evidence when they are evaluating potential effects in uncertain counterfactual scenarios (Lear's Report, pp. 44-46)

⁹⁷According to the House Majority Report (p. 390 and following): The presumption means that a merger which "produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market is so inherently likely to lessen competition substantially, that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects. The presumption is therefore rebuttable, but clearly shifts to the merging parties the burden of showing that competition in the market will not be diminished". Also OECD, Start-ups, Killer Acquisitions and Merger Control (2020), P. 32.

⁹⁸ As to the merits of merger review, considering the merger efficiencies, the analysed studies suggest ascertaining the likelihood of the acquired company becoming an effective rival. In addition to shifting the burden of proof, meaning the merging parties would have to prove the merger efficiencies to the benefit of consumers—which are specific to the deal and could not be obtained through other less competitive restrictive means (CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 117); Also, House Majority Report, p. 380.

⁹⁹ "These specific merger regulations should require merging firms to demonstrate that the combination will affirmatively promote competition. This shifting of the burden of proof from the government (to prove harm) to the parties (to prove benefit) will assist the DA by placing the job of demonstrating efficiencies on the parties, who have a greater ability to know what they are". (Stigler Report, p. 111)

¹⁰⁰ See also ACCC Report (p. 199) and OECD Competition Policy for the Digital Era (pp. 9, 56, 66 and 129)

63. Therefore, the House Majority Report¹⁰¹ suggests several ways to tackle the digital economy¹⁰². For merger control in specific, it proposes altering the competition law to provide for other rebuttable presumptions. For instance, a rebuttable presumption of dominant position concerning a merger where the acquired player has over 30% of the market share or the acquiring player over 25% of shares¹⁰³. It is worth stressing that in the cases competition authorities cannot rebut a rebuttable presumption, they should block the merger and safeguard consumers¹⁰⁴.

64. Such recommendations seek to balance error costs¹⁰⁵ of this new and yet uncertain reality, avoiding clearing mergers with the potential to result in negative competitive effects upon the market and consumers.

65. There are, however, concerns as to potential changes in the parameters for reviewing mergers of the digital market which suggests a careful analysis of mergers and that interventions be focused on possible acquisitions by rivals to impede market concentration¹⁰⁶. The reasoning for a less restrictive view is that most of the transactions concerning the digital market adjudicated by competition authorities have been cleared unconditionally.

66. As pointed out by the OECD, competition authorities and experts alike, different categories of mergers¹⁰⁷ give rise to different concerns and theories of harm. Nonetheless, vertical and conglomerate mergers have been more frequently under the spotlight of merger reviews in digital markets.

67. The concerns of vertical mergers in the digital market are usually the same as those of traditional markets: market foreclosure, cost rises to rivals, bundling and tying practices, and

¹⁰¹ U.S., House Majority Report, 2020, p. 396-400.

¹⁰² The House Majority Report (p. 378) also recommends reducing conflict of interests through structural separation and restrictions on the area of business, implementing rules to prevent self-preferencing and discrimination, promoting innovation through interoperability, creating a homogeneous, accessible environment for the media, and forbidding the abuse of bargaining power.

¹⁰³ See also Stigler Committee on Digital Platforms Final Report, p. 98, and Report of The Digital Competition Expert Panel, p. 103 (UK)

¹⁰⁴ OECD, Start-ups, Killer Acquisitions and Merger Control, p. 33.

¹⁰⁵ Report for the European Commission, Competition Policy for the Digital Era, p. 51.

¹⁰⁶ Heike Schweitzer, Justus Haucap, Wolfgang Kerber & Robert Welker, German Federal Ministry for Economic Affairs and Energy, Modernising the Law on Abuse of Market Power: Summary of the Report's Recommendations, 2018, pp. 1-3.

¹⁰⁷ "Mergers can be categorised as horizontal, vertical or conglomerate. Horizontal mergers bring together firms that are current or future competitors in a product market, meaning they produce (or will produce) relatively close substitutes. Vertical mergers bring together firms at different stages of the production chain, for example a manufacturing firm and one of its suppliers. Conglomerate mergers involve firms that are not product market competitors, and which are not in a supply relationship. The products of the firms can either be Complements, weak substitutes, unrelated products". (OECD, 2022, Roundtable on Conglomerate Effects of Mergers - Background Note by the Secretariat, p. 6)

access to competitively sensitive information. The ACCC has proposed the necessity of targeting competition measure for digital markets¹⁰⁸, having recommended legally binding codes of conduct, applied service-by-service, which require certain Designated Digital Platforms to address issues including anti-competitive self-preferencing, tying and exclusive pre-installation agreements. New obligations in these codes could also aim to improve consumer switching, information transparency and interoperability between different services, and to better protect business users of digital platform services.

68. Theories of harm that analyse conglomerate effects¹⁰⁹, in turn, have gained focus in the digital sector. According to the OECD¹¹⁰, the theories of harm for conglomerates suggest that digital ecosystems could leverage their market power in one of their products or services, giving the conglomerate advantage amongst potential rivals and hindering competition in these markets. Digital ecosystems could also represent a barrier to new entrants and data advantage in relation to rivals, allowing for more profitable activities to the detriment of competitors and consumers.

69. Taking that into consideration, while the prevalent conglomerate theories of harm focus on conglomerate effects alone, such as tying and bundling, conglomerate mergers might also involve horizontal or vertical issues. In this scenario, evaluating the dynamic effects while analyzing the merger might be especially relevant for competition authorities. In those cases, it might be necessary to analyze further how the new entity would (i) allow the companies to protect its core business, (ii) allow the acquirer to leverage market power from one market to another; (iii) increase entry and expansion barriers; (iv) decrease access and interoperability; (v) enhance data accumulation; (vi) remove incentives for companies to continue innovation process through R&D.

70. Concerning other theories of harm, the ACCC has addressed that competition harm may derive from "data-related anti-competitive self-preferencing conduct". Meanwhile,

¹⁰⁸ ACCC, Digital Platform Services Inquiry Discussion Paper for Interim Report No. 5: Updating competition and consumer law for digital platform services.

¹⁰⁹ "Conglomerate mergers bring together firms that are not currently market competitors, or in a supply relationship with one another. The products of the firms can either be complements, weak substitutes, or unrelated". (OECD, Conglomerate Effects of Mergers - Background note by the Secretariat, 2020, p. 6)

Also: "Conglomerate mergers can generate significant efficiencies, both on the supply side (including production inefficiencies, enabling investments in product complementarities) and the demand side (such as one-stop shopping and common user interfaces). (...) Conglomerate mergers in digital markets may be relatively more likely to result in competition concerns. This is due to market characteristics that increase the likelihood of harm, including economies of scale, low marginal costs, economies of scope, feedback loops and network effects. (...) In particular, conglomerate harms are not likely to emerge unless at least one of the merging firms has strong market power, and the other market or markets feature significant entry barriers, economies of scale or network effects". OECD (2020) Executive Summary of the Hearing on Competition Economics of Digital Ecosystems.

¹¹⁰ OECD (2020) - Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, p. 4.

consumer harm may derive from excessive data accumulation. In turn, in analysing a transaction involving the digital sector¹¹¹, the Belgian authority considered the following data-related theories of harm: "(*i*) the ability and incentive to foreclose competing broadcasters from access to the AVAD platform of the cable operator and (*ii*) the ability and incentive to foreclose competing broadcasters from access to the access from accessing their user data, viewing behavior of their users".

71. These theories, however, are not the only ones to debate issues derived from accumulated data. As data has different types, use purposes, etc., the theories of harm that include data need to consider these specificities as they can raise distinct concerns¹¹², leading to a possible need for a case-based analysis.¹¹³-¹¹⁴. For this same reason, in the response to the survey, the Colombian competition authority indicated that in light of the impossibility of considering the mere data collection, processing and accumulation, it is a problem from a competition point of view¹¹⁵.

72. Thus, like vertical and conglomerate transactions, accumulated data can also have an ambivalent effect on markets, i.e., it can produce both economic efficiencies and translate into competition concerns¹¹⁶. Because of that, it is fundamental that competition authorities be able to differentiate pro-competitive mergers from those with negative effects on competition and consumers. To do so, authorities need to employ the proper tools for merger assessment, such as market definition, quantifying dominant position and market power, and the effects of data accumulation.

¹¹¹ For further information on vertical mergers in the sectors of technology, media and telecommunications see: OECD, Vertical Mergers in the Technology, Media and Telecom Sector – Note by the EU, 2019. Available at: https://one.oecd.org/document/DAF/COMP/WD(2019)12/en/pdf

¹¹² Brazil, Chile, Colombia, the European Union, Hungary, Japan, Kenya, Serbia, Spain, Slovenia, Sweden, Taiwan, Turkey, and the United Kingdom.

¹¹³ Brazil, Colombia, the European Union, Germany, Japan, Taiwan and the United Kingdom.

¹¹⁴ As the Chilean authority puts it, "the relevance of the use and collection of information to generate competitive advantages will depend on different factors, such as whether the data has a high and lasting added value, whether it can be used exclusively by the owner, whether it leads to improvements in products and services that are difficult to copy, or other factors".

¹¹⁵ Determining the competition concerns that arise from the collection or treatment of data by digital platforms should be done on a case-by-case basis. The competition authority shouldn't assume that a particular data is per se worrisome. However, it should not be ruled out that the data collected may present a competitive advantage if it is through them that companies compete. The data can become competitive variables (as is the price in other markets) that can be affected by companies to carry out anti-competitive practices.

¹¹⁶ "Conglomerate mergers can generate significant efficiencies, both on the supply side (including production inefficiencies, enabling investments in product complementarities) and the demand side (such as one-stop shopping and common user interfaces). (...) Conglomerate mergers in digital markets may be relatively more likely to result in competition concerns. This is due to market characteristics that increase the likelihood of harm, including economies of scale, low marginal costs, economies of scope, feedback loops and network effects. (...) In particular, conglomerate harms are not likely to emerge unless at least one of the merging firms has strong market power, and the other market or markets feature significant entry barriers, economies of scale or network effects". (OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020)

73. Subsequently, it is relevant to examine current tools, how authorities have been reviewing mergers and acquisitions in digital markets, the main challenges and suggestions to overcome them.

V) TOOLS AND ANALYSES EMPLOYED IN MERGER REVIEW IN DIGITAL MARKETS

74. Many authorities have guidelines defining criteria for reviewing mergers and acquisitions. The guidelines provide transparency and promote legal certainty for market players involved in a merger or acquisition. They have relevant enforceability and provide players with information—defining stages of analysis, related technical issues, and criteria to be considered.

75. Merger review considerations can include (i) the product and geographic market definitions and (ii) the market concentration resulting from the transaction considering postmerger market conditions and rivalry. Assessing mergers can involve determining a company's dominant position, its market power and ability to exert it, rivalry conditions, and market specificities, including barriers to entry and potential competition.

A) MARKET DEFINITION IN DIGITAL MARKETS

i. MAIN CONSIDERATIONS

76. The relevant market is one of the main concepts in antitrust and comprises an analysis on two levels: the product and geographic markets¹¹⁷. A product market comprises all products and/or services consumers consider substitutes due to their specificities, price and use. Whilst a geographic market is the location in which rivals compete for supplying products or services with similar competition conditions, which in digital markets can even be of global scope¹¹⁸.

 $^{^{117}}$ In the EU, the EU merger control framework recognises market definition as an essential part of the assessment of merger cases. For more information: paragraphs 6 – 8 and 12 of the Commission Notice on the definition of the relevant market for the purposes of Union competition law, OJ C 1645, 22.2.2024.

¹¹⁸ "Broad geographic market definition: Digital markets may be notionally borderless, but analysis will be needed to uncover limitations to the geographic scope of markets (such as regulatory or linguistic limitations)" (OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 29). The European Commission states defining the geographic market may vary based on each case. "In digital cases, the Commission has thus for instance found markets to be: national (e.g. for instance for general search services and comparison shopping services in AT.39740 – Google Search (Shopping); alongside linguistic borders within the EEA (e.g. online advertising services in M.9660 – Google / Fitbit)); (at least) EEAwide (e.g. for cloud computing in M.9660 – Google / Fitbit); or global in scope (e.g. for deployment-centric application platforms in M.9205 – IBM / Red Hat), potentially excluding select countries (e.g. excluding China for OS-specific app stores in M.9660 – Google / Fitbit)".

77. Market definition is therefore of great relevance for antitrust analyses. It enables to ascertain substitute products and services and how they affect competition, and in which geographic location they take place. For this reason, usually, the first step competition authorities take in their analysis is determining the relevant market affected by a transaction in these aspects¹¹⁹. Nonetheless, definition has been disregarded in some cases with the advances of digital markets. This is not due to authorities changing their position as to the need or usefulness of market definition, but due to challenges posed by digital markets in defining the relevant market.

78. The main difficulties authorities commonly experience in defining a relevant market in the digital sector include:

- (i) The possibility of integrating online and offline markets in the same relevant market;
- (ii) Defining the relevant market in transactions involving multi-sided interactions;
- (iii) Defining the relevant market in the cases of conglomerates, i.e., businesses that operate digital ecosystems; and
- (iv) The development of markets based on data processing and monetization.

79. The first topic further debated regards the possibility of integrating traditional and digital markets in the same relevant market. Over time, authorities found¹²⁰ that ex ante market definition for all digital segments is unfeasible. Thus, analyses should be made on a case-by-case basis¹²¹ since some markets could be close substitutes for some products and services but for others not regarded as such¹²².

¹¹⁹ Competition authorities from BRAZIL, HUNGARY and SPAIN, for instance, have stated that after carrying out several tests that pointed to the lack of competition risks, they found it preferable to approve transactions without a pre-definition that could later bind the authority.

¹²⁰ Several authorities such as those from BRAZIL, CANADA, THE EUROPEAN UNION, COLOMBIA, THE UNITED STATES, HUNGARY, SPAIN, AND TURKEY have already discussed whether the digital and traditional markets could have the same relevant market.

¹²¹ The Hungarian authority positioned about the topic as follows: "*The GVH would like to emphasize at this point that market definition (also possible segmentations) and hence the substitution between online and offline activities depend on the characteristics of the product/service in question and thus should also be investigated and determined case by case*", (such as in cases VJ/12/2019. Netrisk / Biztosítás.hu and VJ/14/2019. and MAG / Extreme Digital).

The Belgian authority has a similar understanding, suggesting it to be case-dependent. "Some sectors might be evolved towards a market where both types of activities are sufficiently substitutable so that they can be considered as part of the same market, while in others these different activities still belong to different markets".

¹²² As the Chilean authority positioned in its answer: "4. It should consider all possible substitutes, including both digital and physical activities when relevant. i. This FNE has analyzed this issue in case Docket No. FNE F217-2019 "Adquisición de control en Cornershop por parte de Uber Technologies, Inc.", §93, and has rules in its Horizontal Merger Guidelines, §101."

80. Multi-sided markets are another sensitive topic¹²³. Competition authorities point that, in dealing with these markets, the relevant market shall be defined on a case-by-case basis as it provides for two means of assessment: a definition comprising the many sides of a platform at issue separately (multimarket approach) or a single definition that encloses all sides (single market approach)¹²⁴.

81. A multimarket analysis is usually simpler and allows for identifying and assessing rivalry in each "side" of the market, understanding its competition dynamic individually. Additionally, analysing them separately makes it easier to find direct substitutes for products for each market chain. Such an analysis also permits identifying if a specific company has a dominant position on one of the sides.

82. However, multimarket analysis possibly may not elucidate competition properly in some situations¹²⁵. As the OECD suggests¹²⁶, it may not comprehend the existing indirect network effects between the sides of the platform, that is, the direct relation relevance among the market chains, in addition to failing to comprehend the dynamics of zero-price markets on one side, cross-subsidies, and possible competition between ecosystems.

¹²³ "The survey sought to ascertain at what stage of the antirust analysis competition authorities usually take this feature into account – at the stage of the market definition, the dominance assessment, the assessment of effects of the conduct or of efficiencies. All, but one, responding agencies indicate that they take this factor into account already at the stage of market definition. The requirement to take the multi-sidedness into account already at the stage of market definition is explained by some responding agencies with the need to consider demand-side substitutability in defining the relevant market". ICN, Unilateral Working Group, 2020, p. 8.

¹²⁴ As observed in the ICN, Unilateral Working Group, p. 11. Market definition for multi-sided markets should occur on a case basis, as defended by authorities from Germany, Mexico, Norway and Taiwan.

CHILE - When reviewing a merger that involved transactional platforms, the FNE adopted a single-market approach, in which all sides of the platform were grouped in a single market definition. In the case of non-transactional platforms, generally, the FNE will find it preferable to adopt an approach of defining multiple markets for each user group using the platforms, as explained in FNE's Horizontal Merger Guidelines, §102.

On this matter, the merger guidelines of the Japanese authority states: *If a platform works to provide third party with the "place" for their service where a multi-sided market with multiple, different user segments is created, the JFTC will basically determine a particular field of trade for each user segment and then determine how the relevant business combination will affect competition in light of the characteristics of the multi-sided market as described later in Part IV, 2 (1) G.*

COLOMBIA - Considering the nature of these mergers and its recent relevance in digital markets, a case-by-case analysis must be made to construct an appropriate guideline to analyze these operations in the future. In the case of CMR – COME YA, SIC analyzed the two-side market, however many standard analyses had to be re-examined to adapt to the case. In conclusion, a casuistically approach must be made.

¹²⁵ The Colombian authority provoked a relevant discussion when adjudicating the Walmart/Cornershop case. It adopted the single market definition, as they have stressed in the ICN MWG Webinar on Control of Data, Market Power and Potential Competition in Merger Reviews. Such definition comprised the market of apps and multivendor websites, excluding offline sale means and the vendors' websites from the analysis. To reach its decision, the authority indicated that it made a thorough analysis of the market, taking into consideration consumers and retailers that used the platform. The authority examined the substitutability level and the competitive pressure of the online and offline supermarkets in contrast to the multivendor platforms. It found that the latter could not substitute offline markets due to consumers' lack of interest in moving to shop. Compared to retailers' websites, the difference would be the delivery time.

¹²⁶ OECD. Market definition in multi-sided markets - Note by Sebastian Wismer & Arno Rasek, 2017, pp. 1-5.

83. Therefore, it seems appropriate that in dealing with multi-sided markets, the authorities consider these issues and make a careful case-basis analysis to determine the best market definition for the case at hand.

84. There is also a discussion on possibly broadening the market definition, or, more generally, the competitive assessment regarding conglomerate transactions or transactions involving players that operate in digital ecosystems. Thus, in addition to considering the functionality or product at issue, and according to those who aligns to that position, the authority would also consider the ecosystem itself, extending the standards usually employed in defining a market¹²⁷.

85. Taking that consideration into practice, there might be three ways of defining product markets in cases involving multi-sided markets: (i) a system market comprising both the primary and the secondary product; (ii) multiple markets, namely a market for the primary product and separate markets for the secondary products associated with each brand of the primary product; and (iii) dual markets, namely the market for the primary product on the one hand and the market for the secondary product on the other hand¹²⁸.

86. The OECD¹²⁹ has a similar understanding as to defining the relevant market of conglomerates, which would involve "(*i*) Considering the relationships between products within an ecosystem, and potentially defining broader systems markets – although the precedential impact of this strategy on future cases should be considered; (*ii*) Defining markets for production capabilities and inputs in addition to product markets to capture the concerns noted above about the use of conglomerate mergers to control data or other important inputs"¹³⁰.

87. Consequently, authorities should address some considerable characteristics in analyzing and defining the relevant market, such as switching costs, network effects, and multi-homing. This analysis based on qualitative metrics, might be especially important in the digital sector and are a case-by-case analysis¹³¹. Properly defining the market for transactions

¹²⁷ As of now, the ecosystem is usually taken into account later in the competitive assessment.

¹²⁸ For more information, please see: ICN MWG Digital Mergers Report, Section 2.1.1

¹²⁹ OECD (2020), Roundtable on Conglomerate Effects of Mergers - Background Note by the Secretariat

¹³⁰ OECD (2020), Consumer data rights and competition: Background paper by the Secretariat.

¹³¹ In response to the survey, the EUROPEAN UNION stated that: *In certain digital markets, and in particular zero-price markets, qualitative features and consumer usage metrics can complement and may actually be even more relevant than price (and by extension the SSNIP test). The Commission may, on a case-by-case basis, rely on (some of) these features and metrics when assessing the substitutability of different products or services, in order to define the relevant product markets.*

markets that involve digital ecosystems, and different business model¹³², results from the need to assess competitive dynamics in adjacent markets, considering the lock-in effect on consumers and its consequences to competition¹³³.

88. In this scenario, the EU in reponse to the survey, posed that "the Commission is currently reviewing the Market Definition Notice, which dates back to 1997. The revised notice, which should be adopted in 2023, will introduce, inter alia, more guidance in relation to the definition of markets, in particular in the digital space, for instance, where digital ecosystems and multi-sided platforms are involved. Such guidance should also reflect the approach adopted in more recent cases in the area of antitrust and mergers, including M.7217 Facebook/WhatsApp, M.8124 Microsoft/LinkedIn, and M.9660 Google/Fitbit"¹³⁴.

89. On the Google/Android case (T-604-18), the European Commission expressed itself as follows: "in a digital 'ecosystem' [...] the products or services which form part of the relevant markets that make up that ecosystem may overlap or be connected to each other on the basis of their horizontal or vertical complementarity. Taken together, the relevant markets may also have a global dimension in the light of the system that brings its components together and of any competitive constraints within that system or from other systems".

90. In sum, as observed in the answers to the questionnaire, a case-by-case analysis seems adequate as it is unfeasible to assume how the market will be defined. Authorities from Brazil, Japan, Spain, Slovenia, Colombia, Kenya, Mexico and Serbia, for instance, indicated that the market definition could be broadened when dealing with digital ecosystems depending on the case. The Norwegian authority, in turn, said broadening the relevant market would be undue as a rule. The German authority is taking ecosystems into account in particular in the context of assessing "paramount significance for competition across markets", which does not necessitate broadening the market definition itself.

¹³² ICN, Unilateral Conduct Working Group. Report on the result of the ICN survey on dominance/substantial market power in digital markets. P. 15, 2020: US FTC points out that there are many different business models for digital platforms, and each one must be assessed using appropriate market definition tools

¹³³ "To include the ecosystem in the definition would result from the need to assess competitive dynamics in adjacent markets, taking into account the lock-in effect and its consequences to competition". CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados. (2020), P. 20.

¹³⁴ The European Commission adopted the new Market Definition Notice on 8 February 2024. The new Market Definition Notice provides new guidance on defining markets in digital sectors. In particular, section 4.4 of the new Market Definition Notice provides specific guidance on defining markets in the presence of multi-sided platforms and section 4.5 in the presence of after-markets, bundles and (digital) ecosystems. See Commission Notice on the definition of the relevant market for the purposes of Union competition law, OJ C 1645, 22.2.2024."

91. In some digital markets, data is regarded as so relevant to competition that some reports¹³⁵, such as those of the OECD¹³⁶, discuss possible data-driven markets, i.e., markets that are driven and shaped by a broad, massive need for accumulating, processing and selling data^{137_138}.

92. Data may constitute a standalone market, typically when such data is already being actively sold and purchased by market participants¹³⁹. In this sense, some competition authorities suggest analysing data to ascertain if defining a relevant market should consider, for example, the amount of collected data and the variety, value and speed of data collection.

93. Digital markets are bringing many relevant issues for merger review. Therefore, some reports¹⁴⁰ mention it would be reasonable for competition authorities to update their merger and acquisition guidelines, elucidating how they would deal with some specificities of these markets, such as data relevance, consumer behaviour and network effects.

ii. **QUALITATIVE METRICS ON MARKET DEFINITION**

94. Given the dynamic and mutable characteristics of the digital sector, it is often discussed whether competition authorities should develop new tools for determining market

¹³⁵ OECD (2019), An Introduction to Online Platforms and Their Role in the Digital Transformation. Data Privacy BR (2021), A multijurisdictional analysis of data-driven mergers: current assessment and public policy proposals for Brazil (pp. 15-27).

¹³⁶ OECD (2020), Consumer data rights and competition: Background paper by the Secretariat, P. 32.

¹³⁷ The discussion rose in Case M. 7337 IMS Health/ Cegedim Business, which assessed the existence of the following relevant markets: (1) healthcare professional databases; (2) sales tracking data; and (3) data for the provision of real world evidence ("RWE") and primary market research ("PMR") services.

¹³⁸ In this regard, the Turkish authority stated in their answer to the questionnaire that data can also regard the payment made by users in zero-price markets. In their words: *In zero-price markets, data becomes more important as a medium of exchange. Since users provide data about themselves to the platform as their usage fees, it may be said that the service they receive is compensated commercially. In that context, digital markets are not significantly different from traditional markets. On the other hand, in these markets it is not possible to define the boundaries of the market clearly. Competitive effect assessments conducted in these markets are based on quality instead of price.*

¹³⁹ ICN, MWG Webinar on Control of Data, Market Power and Potential Competition in Merger Reviews, 2022.

¹⁴⁰ Belgian, Dutch and Luxembourg competition authorities' Joint memorandum on challenges faced by competition authorities in a digital world, 2019, p. 6: *Since market definition in dynamic multisided markets can be complex, updated guidelines clarifying how e.g. the role of data, consumer behaviour and network effects should be taken into account are desirable. This will also enhance a uniform approach by the European Commission and the Member State competition authorities.*

positions¹⁴¹. Some suggestions include using direct evidence¹⁴² and qualitative criteria¹⁴³, such as functionality, innovation, privacy and the attention paid¹⁴⁴.

95. Although competition enforcers are usually more familiar with price-related tools, considering more qualitative criteria in merger reviews is becoming increasingly important¹⁴⁵, even though they are said not to be as objective nor precise as those based on price¹⁴⁶.

96. The relevance of adopting criteria not exclusively related to price is best observed in zero-price markets, which present considerable limitations to traditional econometric tests, such as the "small but significant non-transitory increase in price" (SSNIP) and the "critical loss analysis"¹⁴⁷ that are applied to determine a relevant market¹⁴⁸.

97. The reason for reconsidering price-based tests is also related to the consumer of digital services being more price sensitive than in traditional markets. This consumer pattern may diminish these metrics' precision in accurately conveying markets' competitive dynamics. This is because when used to not paying for a service, even a small price change may result in consumers switching suppliers¹⁴⁹.

98. The authorities have been questioned about the tools used to define a relevant market within traditional markets and their possible use in digital markets. From the 22¹⁵⁰ answers

¹⁴⁵ OECD, Considering Non-price Effects in Merger Control – Background note by the Secretariat, 2018.

¹⁴¹ The European Commission answered that "In cases concerning platforms in general, and zero-price services in particular, where prices are not available or informative, the Commission instead assesses product and service functionalities, characteristics and intended use, which are the starting point for determining substitutability relationships".

¹⁴² With respect to market definition, internal firm documents prepared prior to the commencement of the investigation or merger negotiations (e.g. executive presentations, emails regarding competitive positioning and strategic plans) can also be helpful in understanding how the firms viewed the competitive landscape and potential competitive threats or in shedding light on the rationale of a transaction. Firms may also hold analysis that could be repurposed for market definition purposes, such as consumer surveys. (OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 29.)

¹⁴³ The need for qualitative criteria to define the relevant market in digital markets has been raised by the European Commission, Kenya, Mexico, and others.

¹⁴⁴ As stated by the Belgian, Colombian, Kenyan, Mexican and the European Commission authorities, amongst others.

¹⁴⁶ See: European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 45.

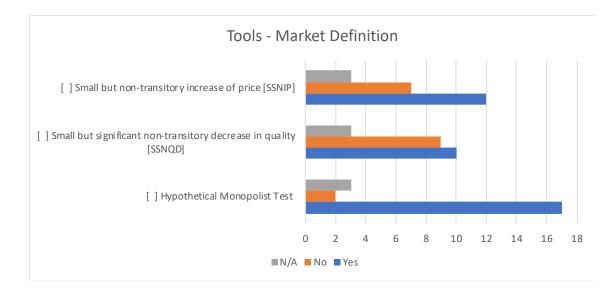
¹⁴⁷ Heike Schweitzer, Justus Haucap, Wolfgang Kerber & Robert Welker, German Federal Ministry For Economic Affairs and Energy, Modernising the Law on Abuse of Market Power: Summary of the Report's Recommendations, 2018, pp. 28-29. In this regard, the German authority answered: *"The Bundeskartellamt generally sees some drawbacks regarding the use of the SSNIP-test and therefore implements this test rather rarely"*. The Hungarian and Spanish authorities also stressed the same difficulty.

¹⁴⁸ CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 11.

¹⁴⁹ As mentioned in the EU Commission decision on Case M.7217 Facebook/WhatsApp, "price is one factor that influences the popularity of a consumer communications app. Indeed, the users of consumer communications apps tend to be very price-sensitive and expect a consumer communications app to be provided for free".

¹⁵⁰ Authorities from NORWAY and TAIWAN said they do not use any of said tests.

received¹⁵¹, three authorities opted not to answer this question as they had not yet dealt with digital markets¹⁵². In addition, 17 of the 19 queried authorities indicated they could employ the hypothetical monopolist test¹⁵³ to define a market in specific cases. Moreover, 10 out of the 19 authorities mentioned they could conduct qualitative tests for this purpose (such as using the SSNDQ¹⁵⁴ test)¹⁵⁵. Lastly, 12 out of the 19 authorities also stressed to use the SSNIP test in some cases¹⁵⁶. It is worth noting that the European Commission¹⁵⁷ and Germany¹⁵⁸ mentioned the possibility of using different tests when defining relevant markets, generally basing their decision on a "concept of demand-side substitutability".



99. The inquity also showed that the use of direct evidence is also strongly recommended to have a proper market definition that regards the digital sector. Consequently, authorities

¹⁵¹ It should be noted possible submission of multiple answers.

 $^{^{\}rm 152}$ Australia, Bulgary and Lithuania.

¹⁵³ As noted, although being the primary test used for market definition, its applicability for digital markets may not be as easy. Authorities that reported to use the test for market definition: BELGIUM, BRAZIL, CHILE, COLOMBIA, THE EUROPEAN UNION, GERMANY, HUNGARY, JAPAN, KENYA, MEXICO, SERBIA, SPAIN, SLOVENIA, SWEDEN AND TURKEY. ¹⁵⁴ According to the Taiwanese authority: *"The method of 'small but significant non-transitory decrease in quality' (SSNDQ) with quality is regarded quality as the main competition parameter. The concept of the SSNDQ method is similar to the SSNIP method. The point lies in taking 'quality' as the main competition parameter, that is, taking the core goods or services of the case as the initial candidate market, and then gradually testing the profit of the hypothetical monopoly after a slight but significant non-temporary decline in 'quality' changes in circumstances to define the relevant market".*

¹⁵⁵ Belgium, Brazil, Chile, Colombia, the European Union, Germany, Japan, Kenya, Spain and Turkey.

¹⁵⁶ Belgium, Brazil, Chile, Colombia, the European Union, Germany, Japan, Kenya, Serbia, Spain, Sweden and Turkey.

¹⁵⁷ The Commission relies primarily on the concepts of demand-side and supply-side substitutability to identify relevant product markets (which may in turn include using one or more of the listed tests, particularly for demandside substitution assessment). In relation to the definition of geographic markets, the Commission primarily relies on the concept of homogeneous conditions of competition.

¹⁵⁸ The aforementioned tests are sometimes taken into account. The established principle in Germany is based on a concept of demand-side substitutability.

may rely on a company's internal documents to define a market and estimate market power, particularly to assess how the said company perceives that sector and competition¹⁵⁹.

100. Competition authorities may also conduct interviews or market research with consumers and studies on how a business dealt with possible market changes, gather internal documents that details the relations among a platform's sides or the products of a digital ecosystem, and request specialist opinion. Concerning market definition, internal documents prepared before the start of investigations or merger negotiations—e.g., executive summary, emails regarding the competitive position and strategic planning—can also help understand companies' view of competition and possible threats to competition or explain the rationale of a transaction. Companies can also carry out analyses that may be used for market definition, such as consumer research¹⁶⁰.

101. Market tests¹⁶¹ and direct evidence may help prevent authorities from indulging in a market definition presented by a business interested in the transaction, avoiding decisions that may be outdated within a short length of time.

102. Thus, although general concepts of market definition (such as supply and demand substitutability) apply to digital markets, competition authorities would face significant practical challenges in enforcing tests related to substitutability¹⁶².

iii. MARKET POWER IN DIGITAL MARKETS

103. As pointed out by the OECD, the relevant market definition is not an end in itself but a starting point for antitrust review to ascertain other important aspects regarding competition¹⁶³. The relevant market is then a key to determine rival players, substitute products, the market power of players, and the geographic limits where competition takes place.

104. Once delimited, it is relevant to identify the market structure and players with a dominant position. As a rule, this analysis derives from a direct relationship between a company's market share and its likelihood to affect competition conditions unilaterally¹⁶⁴.

¹⁵⁹ **HUNGARY** - "For Direct evidence of market power: internal documents, market studies".

¹⁶⁰ OECD, Handbook on Competition Policy in the Digital Age, 2022.

¹⁶¹ As mentioned by CADE at ICN MWG - Digital Mergers - Webinar 1: Market Definition.

¹⁶² Bundeskartellamt, Market Power of Platforms and Networks (2016), pp. 5-6.

¹⁶³ OECD, Market definition in multi-sided markets - Note by Sebastian Wismer & Arno Rasek, 2017, p. 3.

¹⁶⁴ In this sense, market share is considered a near-universal feature of any competition enforcement decision or market study assessing market power, including those involving digital firms. (OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p.8)

105. In traditional markets, authorities would use some quantitative-based metrics to identify players' market share, such as turnover, sales volume and productive capacity.

106. However, traditional parameters may not precisely capture the specificities of digital markets, making qualitative metrics more significant to assess them. For instance, data access and its relevance, network effects, existing and potential rivalry, and possible market barriers¹⁶⁵. That is why, in 2017, Germany clarified its rules for determining market power by explicitly including factors contributing to it, in particular in platform and network markets¹⁶⁶. According to it, market power assessment for the digital sector should consider network effects, multi-homing, innovation-driven competitive pressure and access to data¹⁶⁷.

107. Nonetheless, and given that digital markets, especially nascent markets provide for disruptive innovations¹⁶⁸, estimations may be detached from reality almost immediately¹⁶⁹, and new functionalities or technologies overcome dominant players within a short time interval¹⁷⁰. The digital market dynamics, then, cause remarkable market evolutions to be regarded as possibly imprecise¹⁷¹ since, in the digital sector, a player's position and the market structure may vary completely in a short time¹⁷².

¹⁶⁵ Competition analysis must also grapple with the potential entry of new competitors in a market, and new product development pipelines. To do so, they may need to consider the innovation capacity of firms, which may provide a different picture from current product markets. (OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 29.)

¹⁶⁶ Even though the changes regard the unilateral conduct legislation, its contributions are valuable for this work.

¹⁶⁷ GERMANY - "Since the ninth amendment of the German Competition Act, which entered into force in 2017, access to data relevant for competition is explicitly included in the law as a factor to be considered when assessing market positions. Therefore, it has to be considered also in merger reviews (if applicable). Again, this can involve various dimensions, for example the breadth of data and the depth of data, or volume, variety, velocity, and veracity, just to name a few, which also include and relate to the amount of data collected. Case examples include the BKartA's decisions in CTS Eventim/Four Artists and Allianz/ControlExpert."

¹⁶⁸ According to the European Commission in Case no. COMP/M.6281 – Microsoft/Skype, using metrics based on market shares "were of limited explanatory value given the market was nascent and subject to rapid changes." In turn, in Case M.7217 – Facebook/WhatsApp, the Commission stressed that understanding and stated "frequent market entry and short innovation cycles" meant that high market shares did not necessarily indicate market power.

¹⁶⁹ Based on the OECD (2018), Market Concentration: *Issues paper by the secretariat: the picture provided by static market shares is incomplete, given they can only provide a preliminary indication of limitations to substitution, and do not provide any information on the potential for supply-side substitution or new entry. The limitations of market shares are especially pronounced with respect to digital platforms.*

¹⁷⁰ According to the previous ICN questionnaire: "Several of the responding agencies consider that market shares in digital markets should be handled with caution because digital markets are dynamic and market shares may fail to reflect the actual market development, including the possible attractiveness of new products." (ICN, Unilateral Working Group, P. 14)

¹⁷¹ CADE. Working Paper no. 005/2020. Concorrência em Mercados Digitais: uma revisão dos relatórios especializados. (2020), P. 19.

¹⁷² As stated by the Taiwanese authority. "Due to the constantly changing and innovative nature of the digital economic market, the reliability of static indicators will be reduced, because the market power of the enterprise may change at any time. The dynamics and innovations of the digital market make static indicators need to be adjusted when analyzing dominance. At this time, competitive indicators of market dynamics, such as entry barriers (e.g. key majority and switching costs), diversity of access to end-user channels, and degree of innovation can be incorporated to fully assess the market power of the digital

108. However, one can assess market power even in markets with stable market shares. That is, some authorities have expressed concerns with stable position in the market since it can suggest *"entrenched market power for the incumbents"*¹⁷³. Similarly, other authorities¹⁷⁴ pointed out that profit margin stability may also be an indicator of market power.

109. In addition to these indicators, and as it will be further detailed, other metrics can be used to estimate market share or indicate market power, as it is the case for gatekeepers^{175_176}, bottleneck power effects, digital ecosystems' development¹⁷⁷, intermediation power of platforms, and others¹⁷⁸.

iv. MARKET SHARE AND MARKET POWER

110. As already mentioned, quantitative-based criteria may not be appropriate for the digital reality. According to the OECD¹⁷⁹, they should be used together with qualitative

market. In addition, if the enterprise involves a digital platform transaction model, data indicators such as internet traffic, search volume, the types of platforms currently used by users, the number of users at each side of the platform, and the elasticity of demand at each side of the platform can be listed as research and survey indicators so as to properly assess market scope and market power."

¹⁷³ Such aspect has been mentioned in the Google Search case adjudicated by the French authority (Autorité de la Concurrence, Decision 19-D-26), in the DOJ complaint against Amazon (District of Columbia v. Amazon.com Inc., 25 May 2021), and the European Commission decision on Google Shopping case (AT. 39740).

¹⁷⁴ Oxera, Market power in digital platforms, 2018, p. 8

¹⁷⁵ Based on the Digital Markets Act, Gatekeepers would be service providers essential to a platform's function. Article 3 of the regulation determines three objective criteria to consider a market player a gatekeeper. First, to have a significant impact on the internal market. Second, to connect many business users to end users. Third, to hold a lasting market position or possibly hold this position shortly.

¹⁷⁶ Stigler Center, Stigler Committee on Digital Platforms Final Report, 2019, p. 105; ACM, Price Effects of Non-Brand Bidding Agreements in the Dutch Hotel Sector, 2019, p. 40; U.S. House of Representatives, Report on Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations, 2020, p. 39.

¹⁷⁷ European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p.49.

¹⁷⁸ "There are certain market characteristics that contribute to digital firms' market power in new ways. Network effects, which have traditionally been considered in the context of physical infrastructure and capacity limitations, have taken on a wholly new dynamic in dematerialised digital markets. With experience, authorities have begun to identify the situations in which they contribute to market power, and those in which their effects on market structure are minimal. The ability of consumers to multi-home also features prominently, as it may be an important mechanism for enabling market entry and contestability. Further, linkages between products (and the corresponding ability to leverage market power across markets) have been a growing area of interest for authorities, particularly given the importance of ecosystem business models and conditions in digital markets that may amplify the risk of harm. Finally, while the assessment of data may in some ways be similar to that of any other scarce resource or essential facility, authorities have also begun to incorporate the role of feedback loops which serve to strengthen first-mover advantages. (OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, pp. 7-8)

¹⁷⁹ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 20.

criteria, especially in zero-price markets¹⁸⁰. Some suggested several qualitative criteria¹⁸¹ such as user engagement, transactions and statistics covering all platform sides¹⁸², price mark-ups, price levels and transparency¹⁸³, profitability measures, output, and rates of entry and exit, and others^{184_185}.

111. To illustrate the qualitative metrics used in analysing the online advertising sector, the French authority¹⁸⁶ reported considering the number of accounts, the number of monthly and daily users¹⁸⁷, the number of visits to a website, the number of logged-in users, the number of uploaded or viewed videos in a platform, the number of searches¹⁸⁸, and others. Similarly, the CMA¹⁸⁹ considered indicators such as the number of searches, the number of page referrals, the number of users, and the time they spent on the platform as potential ways to assist in capturing shares in specific markets.

112. Where access to products is provided mainly for free, as in several digital markets, specially in those with multi-sided platforms, the European Commission may rely on metrics

¹⁸⁰ The ACCC reported in a recent answer to the ICN that "Australia notes that in digital markets where a zero-monetary price is charged, an assessment of market power requires an evaluation of the competitive constraints on quality and other non-price features of the product or service. The widespread and frequent use of particular platforms means that these platforms occupy a key position for businesses looking to reach consumers. Therefore, in addition to the factors represented in the chart above, the Australian authority may also consider the percentage of time spent online."

According to the Comisión Federal de Competencia Económica, p. 35. "Markets with zero nominal prices, large economies of scale, etc. tend to force companies to compete mostly or solely on quality, increasing the importance of nonprice effects in the assessment of consumer welfare."

¹⁸¹ UNITED KINGDOM - "The CMA considers both price and non-price parameters to be relevant in the competitive process, and in its competitive assessment. Non-price parameters may be the primary focus in digital markets where users often do not pay a monetary price for consuming services or content, and where innovation can be the primary way firms compete. For example, in its Digital Advertising Market Study the CMA looked at the time spent on social media platforms as one of the main metrics to assess market power."

¹⁸² In the Delivery Hero/Baemin case, the Korean Fair Trade Commission assessed the market making clear that the parameters used included turnover, number of transactions and the number of visits to the website and app.

¹⁸³ The ACCC Report (p. 158) states that price level and the lack of transparency of advertising costs paid to ad technology providers in relation to actual costs could be regarded as a market power indicator.

¹⁸⁴ "Specific characteristics such as growing returns to scale, network externalities, and the key role of data as an input enable the existence of market power even in apparently fragmented markets". (European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 49-50). Similarly states Bundeskartellamt, Guidance on Transaction Value Thresholds for Mandatory Pre-merger Notification (Section 35 (1a) GWB and Section 9 (4) KartG), 2018, p. 7.

¹⁸⁵ In addition, high-level market share figures will fail to capture any important differences in user characteristics (within a side of the platform) that drive competition, including heterogeneity in usage patterns, level of activity and multi-homing. (OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 8)

¹⁸⁶ Opinion No. 18-A-03 of 6 March 2018 on Data Processing in the Online Advertising Sector, P. 80 – 83.

¹⁸⁷ The Italian authority argued the importance of separating active users from general users when considering market share. Autorità Garante della Concorrenza e del Mercato, Amazon decision, 20 November 2021, pp. 672-673.

 ¹⁸⁸ On its decision for the Google Shopping case, the European Commission considered as an indicator to find market share the volume of searches. Google Shopping decision (AT.39740), 27 June 2017, p. 275
 ¹⁸⁹ CMA, Digital Advertising Market Study, pp. 119-122.

including: usage (such as the number of (active) users, the number of visits, or time spent); audience numbers; the number of downloads and/or updates; the number of interactions; and/or the volume or value of transactions concluded over a platform¹⁹⁰.

113. To define the metrics suitable for estimating market power is not an easy task for competition authorities. As stressed by the European Commission in the Facebook/Whatapp case¹⁹¹: "During the market investigation, the Commission attempted to collect additional metrics to measure the competitive importance of players in the market for consumer communications apps. However, no reliable dataset could be produced. For example, assessing the traffic volumes of consumer communications apps was vitiated by the lack of data from some providers and inconsistent recording methods (for example, in relation to the number of messages sent, messages received, group messages, etc.)". Thus, considering the specificities of each business model, the characteristics of markets, and whether gathering data is relevant, for instance, it is said the authorities should take extreme care in defining the appropriate qualitative indicators for estimating businesses' market power in each reviewed transaction.

114. For multi-sided markets, the responding authorities consider its externalities, as well as the direct network effects where one side of the platform takes advantage of a considerable critical mass obtained by the other side of the platform¹⁹². The Taiwanese authority¹⁹³, for example, informed to have used several metrics to estimate market power in the UberEats/FoodPanda case. Thus, the TFTC "not only took into account the platform operators' operating income, number of orders, credit card contract amount, credit card contract number and number of members as evaluation criteria when measuring the market power, but also the number of cooperative restaurants of platform operators as a basis for assessing market power in order to carry out an overall comprehensive consideration. In addition, the entry barriers formed by the network effect of

¹⁹⁰ For examples in the Commission's decisional practice, see number of active users (M.7217, Facebook/WhatsApp, paras. 95-98), number of visits (AT.39740, Google Search (Shopping), paras. 273-284), time spent or audience numbers (M.9064, Telia Company/Bonnier Broadcasting Holding), number of downloads (AT.40099, Google Android, paras. 591-593), and number of interactions (M.10262, Meta (formerly Facebook)/Kustomer, paras. 176-179).

¹⁹¹ Case M. 7217/ Facebook /Whatsapp.

¹⁹² Lear, Ex-Post Assessment of Merger Control Decisions in Digital Markets – Final Report, 2019, p. 27; and CMA, Online platforms and digital advertising market study, P. 43, 2020.

¹⁹³ In this regard, the Taiwanese authority indicated that on 15 September 2011, the 1561st Commissioners' Meeting of the TFTC deliberated "whether Uber Eats and Foodpanda have improperly restricted the enterprise activities of cooperative restaurants". Since the case mainly involved the platform operator's transaction restriction to their cooperative restaurants, the TFTC not only took into account the platform operators' operating income, number of orders, credit card contract amount, credit card contract number and number of members as evaluation criteria when measuring the market power, but also the number of cooperative restaurants of platform operators as a basis for assessing market power in order to carry out an overall comprehensive consideration. In addition, the entry barriers formed by the network effect of the platform and the characteristics of the two-sided market are also important factors in judging the market position of a enterprise.

the platform and the characteristics of the two-sided market are also important factors in judging the market position of a enterprise".

115. Consequently, given the specificities of each digital sector and the various existing business models^{194_195}, there appears to be a consensus that defining which metrics to use should be made on a case-by-case basis.^{196_197}.

116. Nonetheless, some qualitative metrics seem to have broader applicability. To mention, "the presence of strong economies of scale with low or zero marginal costs; extreme direct and indirect network effects that make it easier for a platform with a large number of established users to attract more users; a data-driven feedback loop which further strengthens the network effects; remarkable economies of scope due the role of data as a critical input; and conglomerate effects" ¹⁹⁸.

1. <u>Network Effects</u>

117. In multi-sided markets, in particular, the attractiveness and relevance of a specific platform will depend on the number of users they have on all sides. Thus, if a platform has a wide range of suppliers for a product but no demand, its usefulness will be null¹⁹⁹. In some types of online platforms (for example, social media²⁰⁰ and instant messages), the usefulness to the users is a result of the number of users on the same side. As the base of users on the

¹⁹⁴ As noted by the FNE in its merger guideline (pp. 31-32): "98. There are various types of 'digital platforms'. The following is a non-exhaustive list based on the scope or segment in which they participate: i) digital information platforms; ii) digital communication platforms; iii) digital platforms for intermediation of goods and/or services; iv) digital platforms for supply chain and logistics; v) digital platforms that facilitate the recruitment of human capital (task platforms); and vi) digital platforms that facilitate services (fintech)".

¹⁹⁵ SWEDEN - "The SCA's experience is that the functioning of multisided markets can differ significantly between markets and that the functioning of multisided platforms can differ significantly within the same digital market. Therefore, it is best to perform the analysis of market power on a case-by-case manner."

¹⁹⁶ SPAIN - "This analysis should be done on a case by case basis. In certain cases defining separate markets may be appropriate and thus market power could be assessed for each side. In other cases it may be preferable to define one multisided market. However, the interaction between both sides should systematically be taken into account."

¹⁹⁷ A total of 17 answers clearly showed the need for case-based analysis that considers market conditions.

¹⁹⁸ OECD, Ex Ante Regulation and Competition in Digital Markets, 2021; and the Belgian Competition Authority, Authority for Consumers & Markets, and Conseil de la Concurrence's Joint memorandum on challenges faced by competition authorities in a digital world, 2019.

¹⁹⁹ As put by the European Commission in adjudicating the Case COMP/M.4523 Travelport/Worldspan "(19) As regards network effects, as for any two-sided platform, demand on one (or both) side(s) tends in principle to vanish if there is no demand on the other side. The size of the network on one side determines the willingness of consumers on the other side to pay in order to join the platform."

²⁰⁰ In this regard, the European Commission positioned itself on the Facebook/Whatsapp case as follows: *Second, a consumer communications service can offer utility to consumers if the people they want to communicate with are also users of that service. Therefore, the relevance of the user base appears to be more important than its overall size. In this context, however, the size of the network of a consumer communications app can have a value for consumers in two ways: (i) a larger network implies that it is more likely that existing contacts will already be using a consumer communications app; and (ii) a larger network will afford greater opportunities for contact acquisition and discovery.* P. 15-16.

same side grows, so does the platform's usefulness; thus, there is the so-called direct and positive network effect, attracting more interest to the platform as a whole. But some platforms have negative network effects, such as dating platforms²⁰¹, where an increase in the number of users may make it harder for a user to find "the ideal one" to "match" with. Also, a larger number of participants can lead to congestion, reducing the perceived quality and usefulness of a platform.

118. Extreme economies of scale and scope, strong network effects, zero pricing and data dependency are market dynamics that favour sudden and radical decreases in competition ('tipping') and 'winner-takes-most' scenarios. These characteristics can make a position of market power or dominance, once acquired, difficult to contest. In its merger decisions, the European Commission considers that markets susceptible to "tipping" are characterized by limited competition and high barriers to entry²⁰².

119. Network effects associated with a dominant position on a specific market can also suggest market power²⁰³, especially when related to a company's last-longing dominance.

120. In this scenario, one can say that competition authorities have a good reason for paying heed to network effects when reviewing mergers and acquisitions, having the JFTC²⁰⁴, in 2019,

²⁰¹ See CADE, Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 11 and OECD, An Introduction to Online Platforms and Their Role in the Digital Transformation, 2019, p.10.

²⁰² The European Commission concluded (or did not exclude) that this was the case for many different relevant markets including: professional social network services (Case M.8124 – Microsoft/LinkedIn, para. 347-348); account to account payment services (Case M.9744 – MasterCard/Nets, paras. 123ff); and online search advertising services (Case M.9660 – Google/Fitbit, para. 439).

²⁰³ ICN Unilateral Working Group (2020, p. 16.) puts: It is argued that in the case of strong network effects, market shares on one side of the platform could play a critical role in determining the ability of the platform to abuse its position on the other side of the platform.

²⁰⁴ "In some cases, the JFTC determines how a business combination affects competition in a particular field of trade in consideration of the network effect and economies of scale, etc. on the relevant field of trade. For instance, in a case where two companies engage in a business combination and then see their products increase in value as the result of securing a certain number of users subsequent to the combination and thereby expect to see a further increase in the number of users of the products supplied by the company group (i.e., a case where the so-called direct network effects work), the JFTC will determine how the relevant business combination will affect competition also considering such direct network effects. Particularly in a case where many of the users use only one service (single-homing), direct network effects are considered to affect competition to a greater extent than when many of the users use multiple services (multi-homing)." Further, in a case where in a platformbased multi-sided market after a business combination, the company group secures a certain number of users in one of their two markets thereby causing as the result the value of their product to increase in the other market (by means of the so-called indirect network effects), then the JFTC will determine how a business combination affects competition also considering such indirect network effects. (JTFC, Merger Guidelines, p. 29.30).

and the FNE²⁰⁵, in 2022, updated their merger guidelines to evidence the importance of assessing network effects in mergers of the digital sector²⁰⁶.

121. It is worth mentioning that network effects can serve as means to determine the existence of market power and constitute a relevant barrier to new players²⁰⁷. In such cases, network effects can increase switching costs²⁰⁸-²⁰⁹, creating lock-in effects for consumers and strategies that obstruct multi-homing²¹⁰. In other cases, network effects can lead to "*tipping*

²⁰⁵ The FNE's Horizontal Merger Guidelines, published in May 2022, has a section dedicated to digital platforms and markets and stresses the relevance of network effects in its analyses: "101. In digital platform markets, the FNE's definition of the relevant market will consider the interaction between different groups of users, since the presence of indirect network effects implies that the value that one side of users obtains from using the platform may depend on the number of consumers of another side. (Fiscalía Nacional Económica, Horizontal Merger Guidelines, 2022, p.32)

²⁰⁶ In adjudicating Case COMP/M.4523 Travelport/Worldspan, the European Commission also pondered over indirect network effects and features common to multisided markets.

²⁰⁷ As emphasised by the European Commission in the Google Shopping case (AT.39740), the Bundeskartellamt in its Working Paper: The Market Power of Platforms and Networks, 2016, p. 14, and the OECD in Handbook on Competition Policy in the Digital Age, 2022, p. 22.

²⁰⁸ Amongst the practices that can raises market barriers, the Belgian authority mentioned, in its response to the survey, some strategies that may increase switching costs: "(*i*) launching a new attractive bundled offer on the market that competitors cannot offer or (*ii*) strengthening network effects by bundling different apps".

²⁰⁹ "It is well established that switching costs can contribute to market power. By discouraging consumers from changing products, they can make entry into established markets more difficult, and dampen the intensity of competition between incumbents. However, in digital markets, authorities attempting to assess the existence of switching costs are often faced with the cliché that competition is 'only a click away'. In practice, consumers can indeed face switching costs as in any other market, and the fact that they are non-monetary does not render them any less impactful. This has been recognised by a range of authorities, including Australia, the European Commission, Italy, Korea and Japan". ACCC (op.cit., 2019). The European Commission's decision in the Google Android case (AT.40099), the Italian competition authority's Amazon case, the Korea Fair Trade Commission's decision in the Google Android Case (2021-329), the Italian competition authority's Amazon case, the report of the Japan Fair Trade Commission's Expert Study Group on Data and Competition and the OECD document The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 16.

²¹⁰ **JAPAN** - "Particularly in a case where many of the users use only one service (single-homing), direct network effects are considered to affect competition to a greater extent than when many of the users use multiple services (multi-homing)."

into monopolies²¹¹, such as when network effects and associated data collection²¹² give rise to self-reinforcing feedback loops²¹³-²¹⁴".

122. For that reason, some argue that network effects should be deemed as something able to build and maintain certain players' market power. In such cases, these players may have incentives to restrict market competition by hampering data portability or interoperability. The players can also show little to no concern with data privacy²¹⁵.

123. In this scenario, network effects can also be seen and considered in conglomerate mergers. For example, an acquisition by a dominant player of a target active in an adjacent market may result in additional users/consumers base in the core markets, thus increasing network effects. In this situations, conglomerate mergers may have similar effects to horizontal mergers when it comes to network effects.

124. As mentioned by the OECD, the possibility of having similar effects to horizontal mergers accrue from the concept of envelopment: "*The concept of envelopment refers to the ability of a platform with dominance in one market to enter another platform market (whether the platforms are complements, substitutes, or unrelated) by bundling or tying the two platform products. As a result of network effects (from the dominant platform's existing user base) and economies of scope (due to shared technology and data), the competing platforms in the second market would be unable to compete. Network effects and economies of scope are generally crucial for the success of the strategy – without an overlapping user base (or potential user base), or at least substantial efficiencies in product development, the bundle or tie is not likely to be profitable"²¹⁶.*

²¹¹ "Strong network effects mean that, as the number of users grows, the value of the product to users increases. In the extreme, these network effects may lead to markets "tipping" into a monopoly". (OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 13-14).

²¹² **KENYA** - "Different kinds of data have different values based on the type of platforms and the competitive edge gained by the platform possessing it. Notably, if the data possessed by a digital player is not accessible by other market players or readily available in the open market then it can raise competition concerns especially if the market player is dominant and the market is characterized by network effects."

²¹³ Feedback loops can be observed with respect to both direct and indirect network effects. As to markets characterised by direct network effects, the more a platform is used, the more valuable and attractive it becomes, creating a cycle that perpetuates a firm's market power. With regard to indirect network effects, the mechanism may have an added complexity but has the same dynamics. For instance, more users on one side of the platform can make it more valuable for advertisers, attracting investment in the platform and even more users as a consequence. When sufficiently strong, these feedback cycles can create a monopoly in the market, especially if no competitor or potential entrant can compete with the platform in terms of attractiveness (increased by network effects). (Australian Competition and Consumer Commission, Digital Platforms Inquiry–Final Report, 2019, p. 66.) ²¹⁴ OECD, The Evolving Concept of Market Power in the Digital Economy; OECD Competition Policy Roundtable Background Note, 2022, p. 10, and Australian Competition and Consumer Commission, Digital Platforms Inquiry–Final Report, 2019, p. 66.

²¹⁵ Ibid, p. 15.

²¹⁶ OECD, 2020, Conglomerate Effects of Mergers – Background Note. p. 26-27.

125. The report also mentions the acquisitions of potential competitor in related markets may enable "a foreclosure in a target market can protect a monopolist's position in a related market. A conglomerate merger may be an effort to prevent competition from reaching a market in which a firm has a dominant position by eliminating nascent competitors. The effects of these mergers, an example of what are sometimes called killer acquisitions"²¹⁷.

126. However, the mere existence of network effects on one side of the market is not sufficient to prove market power²¹⁸. Hence, authorities, in their analysis, should take into account other factors that indicate market power²¹⁹. Furthermore, other features in a market can also mitigate concern over network effects²²⁰. Amongst them, one can name the existence of low switching costs between services²²¹, data interoperability²²², products with different characteristics²²³, and multi-homing²²⁴.

2. MULTI AND SINGLE HOMING

²¹⁷ Id. p. 28

²¹⁸ This was the position of the EU Commission in adjudicating Case M.7217 Facebook/Whatsapp, in which it determined "the existence of network effects as such does not a priori indicate a competition problem in the market affected by a merger. Such effects may however raise competition concerns in particular if they allow the merged entity to foreclose competitors and make more difficult for competing providers to expand their consumer base".

²²⁰ The OECD suggests caution not to overstate the anticompetitive consequences of network effects since they can be deemed pro-competitive at times, as the German authority also stressed. "If only some firms in a market can fully leverage network effects to improve service quality, then the potential for network effects to result in tipping and market power may be enhanced. If all firms in a market can benefit equally from network effects, the emergence of potential challengers could be significantly more likely. Similarly, it may be worth asking whether there are any alternative business models for which some network effects are less important, which would suggest network effects are a less important potential source of market power." (OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 11); and Bundeskartellamt, Working Paper: The Market Power of Platforms and Networks, 2016, p. 9.

²²¹ The Chilean merger guidelines (FNE, op.cit., 2022), recently revised to include digital market concepts, points out that "Among the characteristics that generally favour the existence and potential growth of various players in a digital platform market are the following: i. Capability restrictions in the supply of products; ii. The possibilities of differentiation by digital platforms; iii. Compatibility between different digital platforms1; and iv. Low switching costs for consumers. (...) 112. In general, if there is a relevant number of users that frequently use multiple platforms, indirect network effects will not necessarily lead to high concentration levels, since different platforms could share the common base of multi-homing users."

²²² **SWEDEN** - "The SCA believes that multihoming and interoperability may mitigate antitrust concerns among apps, but it is important to analyse this on a case-by-case basis. For example, simply because multihoming between apps is possible within a digital market, this does not mean that consumers or businesses actually do multihome and switch between competing apps. For example, there may be an advantage to the incumbent app which makes it less likely that consumers use another app, even though it is theoretically very easy to do so."

²²³ OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 11

²²⁴ "Network effects, switching costs, and limitations to interoperability, which on their own can contribute to market power, will significantly shape the effect of homing patterns on a market. For instance, single- homing combined with strong network effects and switching costs may lead to a single firm acquiring durable market power that is insulated from the threat of new entry." (Ibid, p. 13.)

127. Although multi- and single-homing are present in traditional markets, the prevalence of single-homing in the digital sector, especially when connected to other factors, is a source of concern for competition authorities. Ideally, the choice between single and multi-homing²²⁵—i.e., between one and several suppliers—is up to the consumer based on quality, price, product variety, and subjective preferences.

128. When the supplied services are identical, consumers have fewer incentives to use more than one platform for the same purpose. In these cases, special attention is given to this phenomenon when associated with the presence of gatekeepers that might create strategies to prevent multi-homing among the consumers²²⁶. As for markets characterised by diverse products and multi-functional applications, switching costs are much smaller, which tends to mitigate competition concerns²²⁷.

129. This migration of users across service providers (multi-homing) might be fundamental to a competitive environment, as recognised by the OECD²²⁸. When single-homing prevails, users choose one product in the market and are less likely to switch, causing firms to compete mostly for new users. Conversely, in multi-homing, consumers can use several products. This means companies can compete on a much more granular level, not for users but for small, individual transactions or for a sliver of consumers' attention.

130. Multiple competition authorities pay heed to multi-homing in mergers envolving digital markets. Whenever present, it is deemed an important factor to competition, which might be able to mitigate concerns, as seen in cases adjudicated by the Brazilian²²⁹, Chilean²³⁰,

²²⁵ Multi-homing happens when consumers of one or several sides of the market use two or more platforms. (CADE. Annex to Report 24/2017/CGAA2/SGA1/SG. Case no. 08700.004431/2017-16)

²²⁶ OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 12-14.

²²⁷ Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel, 2019, pp. 35–36.

²²⁸ OECD, Rethinking Antitrust Tools for Multi-Sided Platforms, 2018, p. 60–61.

²²⁹ CADE. Merger case no. 08700.003969/2020-17. Decision of the Superintendent-General: 310. The phenomenon of consumers purchasing multiple platforms is crucial for the functioning of these same platforms, as revealed by CADE's Office of the Superintendent-General in a market test. This model is currently adopted by the main wholesalers of management software. Hence, the very features of the analysed markets are able to prevent market foreclosure; otherwise, interoperability between suppliers' solutions—something of increasing importance nowadays—would be at risk.

²³⁰ Decision by the FNE in the scope of Cornershop's acquisition by Uber Technologies, Inc. Rol FNE F217-2019, multi-homing was identified as a mitigating factor of the tipping effect.

Colombian²³¹ competition authorities and the European Commission²³². The latter even stated efficient multi-homing can reduce concerns in horizontal and non-horizontal deals²³³.

131. Markets characterised by strong multi-homing tend to be more competitive as they mitigate the potential effects of consumer lock-in²³⁴, are less prone to significant entry barriers, and have more users migrating across platforms. Furthermore, this phenomenon may give rise to multiple platforms that differentiate from others based on services and products. It also increases competition for innovation and the development of new features, which boosts competition and consumer welfare²³⁵.

²³¹ **COLOMBIA** - "In the CMR – COME YA merger, it was considered that multi-homing allowed to the consumers to change of food delivery app and limited the abilities of apps to affect the prices. Additionally, in a case between three of the principal banks of Colombia (BANCOLOMBIA. DAVIVIENDA, and BANCO DE BOGOTÁ), regarding the digital identification apps market, it was considered that the lack of interoperability between platforms would present a favorable environment for the probability of success of a new entrant to be reduced. This is because the cost for users of multi-homing could discourage competitors from entering the market. In this matter, SIC conditioned the operation to guarantee the interoperability with new platforms to migrate the users without additional costs. Interoperability in this matter would guarantee the dynamic of competition in the market, as it would lower the costs of entry for potential competitors into the digital identification applications market by allowing new entrants to have access to a large amount of data without necessarily incurring the cost of setting up a data capture network, which would allow the new platform to effectively enter and compete in the market."

²³² "(109) In line with the Notifying Party's arguments, the Commission has found in its market investigation that there are no significant costs preventing consumers from switching between different consumer communications apps. 57 This is for the following reasons. First, all consumer communications apps are offered for free or at a very low price. 58 Second, all consumer communications apps are easily downloadable on smartphones and can coexist on the same handset without taking much capacity. Third, once consumer communications apps are installed on a device, users can pass from one to another in no-time. Fourth, consumer communications apps are normally characterised by simple user interfaces so that learning costs of switching to a new app are minimal for consumers. Fifth, information about new apps is easily accessible given the ever increasing number of reviews of consumer communications apps on app stores. (110) In this context, the Commission notes that consumers of consumer communications apps normally multi-home."

²³³ EUROPEAN COMMISSION - "The Commission takes into account consumers' multi-homing practices in its competitive assessment of concentrations in the digital sector. The impact of multi-homing practices and the extent to which they can mitigate competition concerns depends on the realities of each relevant market. For example, multimulti-homing in some markets can help mitigate competition concerns both in the context of horizontal overlaps and non-horizontal relationships: In Microsoft/Skype, the Commission investigated the horizontal overlap between the activities of the parties in the provision of video calls. The Commission found that the concentration would create a market leader in video calls, but it did not raise serious doubts as to its compatibility with the internal market because (among other reasons) 'consumers... multi-home. Therefore, it is easy to switch small groups of users to other competing services... this significantly mitigates any possible network effects related to the proposed transaction.' But in other cases, the Commission found that multi-homing did not suffice to dispel competition concerns. For example: In Worldcom MCI/Sprint, the Commission found that the proposed concentration would result in the creation of a dominant position in the market for top-level universal internet connectivity. Multi-homing by consumers did not change this conclusion, because other networks were only 'used as a back up and for redundancy and to ensure global connectivity.' In Microsoft/Linkedin, the Commission did not accept that 'multi-homing' in the market for professional social networking services could dispel the effects of a possible foreclosure strategy by the combined entity (through pre-installation of Linkedin on Windows and integration of Linkedin into Office). Looking at the realities in this market, the Commission found that 'although many users ha[d] accounts on two [professional social networks], they actively used only one of them.' Therefore, multi-homing was not sufficient to prevent the market for professional social networking services from 'tipping' in favour of LinkedIn."

²³⁴ However, this premise is not absolute, as pointed out by the French-German Report (p. 28–30) and the Bundeskartellamt (Competition Law And Data, 2016, pp. 28–30).

²³⁵ Bundeskartellamt, Working Paper: The Market Power of Platforms and Networks, 2016, pp. 14–16.

132. Nevertheless, it is important to recognise that mere presence of multi-homing in a market does not make it competitive²³⁶. Even if multi-homing is a possibility, there may be a lack of interoperability or data portability; alternatively, companies may have incentives to adopt practices that restrain multi-homing by imposing costs on rivals, technical barriers, or exclusivity clauses²³⁷. All these measures are likely to raise switching costs, consequently locking consumers in and preventing competitors from accessing any significant portion of the market.

133. Moreover, in certain markets, users may be prone to using a single application²³⁸ even though multi-homing is possible. We have also noticed platforms tend to adopt diverse strategies to retain consumers and discourage multi-homing by manipulating consumer behaviour²³⁹. In addition to measures used within the application itself, authorities have found that ecosystems are more likely to block multi-homing, as rivals should offer the same solutions as incumbent platforms to compete in the market. This may restrain competition and raise entry barriers since new entrants should spend more resources to offer at least the same functionalities as an incumbent competitor²⁴⁰.

134. In this regard, when faced with a transaction, authorities should analyse the features of the market on a case-by-case basis, as reports suggests²⁴¹. Competition authorities seems to be aware of that, considering their replies to the survey mentioning the relevance of analysing multi-homing in merger reviews²⁴².

²³⁶ **TAIWAN** - "At the same time, it is also necessary to consider whether the relevant strategy may be restrained by other competitive forces, such as consumers' substitution possibility of the products or services provided by the merging parties, or whether it exists a bottleneck for other competitors to reach their consumers, or whether consumers have a tendency of multi-homing."

²³⁷ Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel, 2019, p. 35–36.

²³⁸OECD, The Evolving Concept of Market Power in the Digital Economy; OECD Competition Policy Roundtable Background Note, 2022, p. 13; and OECD, Market definition in multi-sided markets - Note by Sebastian Wismer & Arno Rasek, 2017, p. 9–10.

²³⁹ Digital companies take advantage of user behaviour patterns to obtain and maintain their dominant position in the market. According to CADE, these patterns are (i) the salience effect, i.e. when a user clicks on the most evident content; (ii) confirmation bias, i.e. the user's tendency to agree with what they already believe to be true; (iii) maintaining the status quo, as consumers hardly change defaults or switch suppliers; (iv) impatience, anxiety, and lack of control, which happen when users browse social to procrastinate. (Concorrência em mercados digitais: uma revisão dos relatórios especializados, p. 31, 32). Also, Digital Competition Expert Panel, Unlocking Digital Competition: Report of the Digital Competition Expert Panel, 2019, pp. 43. European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 62: *"Platforms rarely directly forbid multi-homing by their users. Sometimes, they make it difficult through technical means."* ²⁴⁰ Commission "Competition 4.0," German Fed. Ministry for Economic Affairs and Energy, A New Competition

Framework for the Digital Economy, 2019, p. 16.

²⁴¹ OECD, Rethinking Antitrust Tools for Multi-Sided Platforms, 2018 and European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 63.
²⁴² Belgium Brazil, Chile, Colombia, the European Commission, Germany, Hungary, Japan, Kenya, Mexico, Spain

²⁴² Belgium, Brazil, Chile, Colombia, the European Commission, Germany, Hungary, Japan, Kenya, Mexico, Spain, Sweden, Taiwan, Turkey.

3. COSTS AND ECONOMIES OF SCALE AND SCOPE

135. As already mentioned, some segments of the digital sector are characterised by economies of scale and scope. Digital companies incur low unit costs to develop their products as processing, storage, replication, and data transmission²⁴³ are less expensive—an aspect the European Commission has previously discussed²⁴⁴. As seed capital is invested to go about their activities, firms in digital markets are able to grow faster and more cheaply than those in traditional markets. In this context, these markets are said to have "no mass" because they usually have no tangible, physical goods linked to the development of the business, as would be the case for traditional markets.

136. So far, the effects arising from economies of scale in digital markets have raised the same kinds of concerns seen in traditional markets, as they may constitute a relative barrier to entry. As a result, markets with increasing returns to scale tend to lead to oligopolies and monopolies.

137. To make it clear, suppose a firm already operates in a relevant market. In this case, it may be easier for it to enter correlated markets²⁴⁵. This advantage may be increased with economies of scope (because manufacturing an additional unit of a good reduces the production costs for another related good) and the development of digital ecosystems.

138. In digital markets, players tend to benefit from economies of scope, considering goods are usually supplementary to each other. Moreover, sometimes production costs (or even user data) can be shared across lines of business²⁴⁶, which has also raised concerns in some merger reviews.

139. Against this backdrop, economies of scope can extend a company's reach to adjacent markets through a broad ecosystem of its own goods whilst incurring fairly low costs. Thus,

²⁴³ CADE. Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 12

²⁴⁴ See, for instance: the European Commission's decisions in the Google Shopping (AT.39740), Google Android (AT.40099) and Adsense (AT.40411) cases; the Korean Fair Trade Commission's decision in the Naver shopping (2021-027) cases; and the US Department of Justice's 2020 Google complaint and 2021 Amazon complaint.
²⁴⁵ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 13–14.

²⁴⁶ As the Spanish authority pointed out in its reply to the survey, "economies of scope are very frequent in digital markets. From the supply side, many digital services share the same inputs, such as data, IT skills and human resources. So, it is possible to say that they have cost synergies. From the demand side, consumers value ecosystems and integrated services."

reports²⁴⁷, decisions²⁴⁸ and authorities²⁴⁹ indicate market power is a possibility when a firm maintains its dominant position in adjacent markets²⁵⁰.

140. Finally, if a company operates in more than one market, users are more likely to be connected to that company for a longer period, which permits more data extraction. In digital markets, that poses a risk of erosion of privacy and unlimited accumulation of data, being a cause of concern for many competition authorities²⁵¹-²⁵², as discussed in the next section.

4. DATA AND MARKET POWER

141. As above mentioned, many digital markets use data to support their activities. Competition agencies have discussed the possibility of data markets constituting a standalone market, especially since sometimes data can be traded in a market and understood as an input for the product or service provided. The OECD²⁵³ described the relevance of data for some markets in the following terms, "data are a central element [in] many digital markets, as a competitive asset, potential entry barrier, and even dimension of quality".

²⁵¹ CADE. Cadernos do CADE: Mercados de Plataformas Digitais, 2020, p. 13.

²⁴⁷ OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 15–16.

²⁴⁸ "There are several ways in which competition authority decisions have recognized linkages between products as contributors to market power. First, market power in one market can be leveraged into new markets, since favorable access to data and consumers may constitute a substantial source of competitive advantage. The European Commission found in its Google AdSense case, for example, that challengers would be unable to match to Google's position in online search advertising because this would require them to develop a rival search engine with similar reach and performance" (European Commission, Antitrust Procedure Decision in Case AT.40411, Google Search).

[&]quot;The Italian competition authority similarly assessed Amazon's dominance with respect to its ecosystem of products, and in particular its influence in relationships with both consumers and firms across multiple markets" (Autorità Garante della Concorrenza e del Mercato, Amazon decision, 20 November 2021).

[&]quot;Further, the Apple App Store's exclusivity in offering apps on Apple mobile devices, and Apple's corresponding control of app developers' access to Apple mobile device users, was considered by the Competition Commission of India." (Competition Commission of India, decision in Case No. 24 of 2021 regarding Apple Inc. and Apple Distribution International Limited.)

²⁴⁹ AUSTRALIA - "The network effects underpinning many digital platforms mean that digital platform markets are often highly concentrated. In such markets, the major constraints can come from potential competition which threatens to displace the incumbent's market position. Firms with substantial positions in these markets can undermine this process by acquiring nascent competitors before they can become a substantial threat."

²⁵⁰ Digital companies try to predict market movements to hold their dominant positions for as long as possible, which allows for greater profits. The Stigler Report argues that "there is growing evidence that platforms have been entering adjacent markets to expand their market dominance." (ibid, p. 35–36). The same point has been brought by the Australian agency in its reply: "large digital platforms are continuing to expand their ecosystems by acquiring firms and developing new products and services that enable them to expand into existing and new markets".

²⁵² See also OECD, Big data: Bringing competition policy to the digital era, 2016; and OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018. Besides, the U.S. House Of Representatives' Report on Investigation of Competition in Digital Markets, 2020, indicates that: "While insufficient competition can lead to reduced quality in many markets, the loss of quality due to monopolization — and in turn, privacy and data protection — is even more pronounced in digital markets because product quality is often the "relevant locus of competition".
²⁵³ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 17–18.

142. In zero-price markets, in which one of the sides of the platform does not pay directly for services, some agencies point out users' attention²⁵⁴ and the data generated by them might be considered the price paid for its usage²⁵⁵.

143. Similarly, a report for the European Commission stated data can be used in diverse manners depending on the market²⁵⁶. Some platforms, for instance, have established large user bases that enable real-time collection, storage, and processing of large amounts of data about users' interests, feelings, influences, and behaviour. Search engines, for their part, capture users' search history and clicks. Social media platforms are generally interested in people's profile information and building social graphs. E-commerce looks mostly at users' purchase history. The list goes on.

144. The relevance of data for a given market is contingent on various aspects and could be of neutral relevance to the market. The assessment of the impact of data on competition should consider multiple factors, as mentioned by most authorities²⁵⁷. In this regard, authorities indicate that, in a merger review, there may be the need for assessing aspects such as the heterogeneity of data, the conditions for data usage and the intention behind data collection²⁵⁸.

145. As the Chilean authority puts it²⁵⁹, the relevance of data for the competitive environment is contingent on its use, collection, and whether it offers competitive advantages. This assessment depends on the value of the data, if it can be used to enhance products, if it is difficult to replicate, amongst others. Likewise, the Colombian authority stated²⁶⁰ that to

²⁵⁴ "The product is monetized through people's attention or with their data. The persistent collection and misuse of consumer data is an indicator of market power in the digital economy" (ICN, op. cit., p. 51–54.).

²⁵⁵ As the Turkish authority mentioned in its reply: "In zero-price markets, data becomes more important as a medium of exchange. Since users provide data about themselves to the platform as their usage fees, it may be said that the service they receive is compensated commercially."

²⁵⁶ European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 24 and following.

²⁵⁷ Australia, Belgium, Brazil, Chile, the CMA, Colombia, the European Commission, Germany, Hungary, Japan, Kenya, Mexico, Serbia, Spain, Sweden, Taiwan, Turkey, and the United Kingdom.

 $^{^{258}}$ Ibid, p. 73: "First, any discussion of access to data must take into account the heterogeneity of data (along many dimensions), of use cases, of desired access conditions, etc. (...) it is necessary to distinguish between different forms of data, levels of data access, and use cases."

²⁵⁹ In its reply, the Chilean authority pointed out that "the relevance of the use and collection of information to generate competitive advantages will depend on different factors, such as whether the data has a high and lasting added value, whether it can be used exclusively by the owner, whether it leads to improvements in products and services that are difficult to copy, or other factors."

²⁶⁰ **COLOMBIA -** Determining the competition concerns that arise from the collection or treatment of data by digital platforms should be done on a case-by-case basis. The competition authority shouldn't assume that a particular data is per se worrisome. However, it should not be ruled out that the data collected may present a competitive advantage if it is through them that companies compete. The data can become competitive variables (as is the price in other markets) that can be affected by companies to carry out anti-competitive practices.

understand what kind of competition concerns may arise from data usage, one should conduct a case-specific analysis. To this end, it is crucial to characterise the dataset being examined, classifying it by collection method, category, etc.

146. Data can also be categorised according to the purpose of collection as inputs, products, market research information, amongst others. The major concern, according to the OCDE²⁶¹, applies to data categorised as products/services as it as it creates a situation in which data collection by digital companies may give rise to abuses of dominance, especially when that data is difficult to replicate²⁶².

147. Regarding categorisation, studies suggest data can be split into two large groups: **large population dataset** and **high dimensional dataset**. Digital platforms have the volume and capacity to process infinitely larger data than players in traditional markets. Their datasets are relevant because they include data from an entire population together with highly detailed user information²⁶³.

²⁶¹ OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p. 14

²⁶² **AUSTRALIA** - "The ACCC's past analysis of digital platform services has emphasised the importance of data to supply data platform services. The agency found limited or unequal access to data can have a significant impact on competition and consumer outcomes in digital platform markets, including the potential to entrench the market power of incumbent digital platforms".

TURKEY - "As a result, the data held by undertakings may lead to significant market power. If some of them are unable to collect similar data or buy a data source of this kind, they may face barriers to entry in terms of volume and diversity. Thus, market power assessments, specifically in digital markets, must also take into account the data platforms may or may not possess".

HUNGARY - "The idea behind this consideration is that data is often identified as a rare input that grants market power; thus the potential market power derived from data can be leveraged and used in other markets. To consider data as a source of market power, some other features should also be taken into account, like the different types and uses of data, the importance of a specific dataset to compete in a market, and the accessibility of data".

²⁶³ As also stated in CADE's Working Paper no. 05/2020, Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 23.

148. The report Competition Policy for the Digital Era²⁶⁴ categorises data according to usage: (i) **non-anonymous use of individual-level data**²⁶⁵, (ii) **anonymous use of individual level data**²⁶⁶, (iii) **aggregated data**²⁶⁷, and (iv) **contextual data**²⁶⁸.

149. The Australian competition authority mentioned access to "individual-level data" may be a considerable competitive advantage. In these cases, the probability that new competitors effectively enter the market is a fundamental aspect for assessing market power in these cases, regardless of the advantages gained by accumulating individual-level data.

150. However, in addition to individual-level data, large population datasets may also be relevant. The combination of large datasets allows companies to offer unprecedented product customisation, causing users to demand more of its services, which, in turn, creates feedback loops²⁶⁹ that may indicate market power. It is also worth mentioning that companies collect data in their ecosystems through an increasing number of integrated services as well as nudges, defaults, and other exploitative strategies²⁷⁰.

151. In this regard, data accumulation may indicate the consolidation of dominant market positions and potential entry barriers²⁷¹, hindering effective rivalry amongst established

²⁶⁴ European Commission, Competition Policy for the Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 23-24.

²⁶⁵ The first category, non-anonymous use of individual-level data, refers to any individual-level data (volunteered, observed, or inferred) that was used to provide a service to the individual.

²⁶⁶ The second category, anonymous use of individual-level data, includes all cases in which individual-level data was used anonymously. Access to the individual-level data is necessary, but the goal is not to directly provide a service to the individual who generated the data in the first place.

²⁶⁷ The third category, aggregated data, refers to more standardised data that has been irreversibly aggregated. Finally, contextual data refers to data that does not derive from individual-level data. This category typically includes data such as road network information, satellite data, and mapping data.

²⁶⁸ These would typically include cases of data being used to train machine-learning algorithms and/or data used for purposes unrelated to the original purposes for which data has been collected.

²⁶⁹ CMA - "in general, consumer data may allow digital firms to develop and maintain a better quality service, and differentiate a platform from its rival". Also in the Digital Advertising Market Study (§3.237`), the CMA found that "By providing better recommendation and personalisation functionalities, platforms may become more appealing to consumers and lead them to spend more time on the platform".

²⁷⁰ ACCC, op. cit., p. 8 and CADE, Working Paper no. 05/2020 Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 13 and 19.

²⁷¹ In this scenario, it is worth mentioning that decision issued by the Turkish Competition Board (the Board) in dated 11.01.2021 and numbered 21-02/25-M into whether it was considered that Meta Platforms Inc. abused its dominant position. It was decided that the company distorted competition by complicating the activities of its competitors operating in personal social network services and online display advertising markets and creating barriers to entry to the market by means of combining data collected from Facebook, Instagram, and WhatsApp services.

players²⁷²-²⁷³. For this reason, the Digital Market Act, articles 5²⁷⁴ and 6²⁷⁵, prohibits combining personal data sourced from core platform services with personal data from any other services offered by the gatekeeper or with personal data from third-party services.

152. As seen in several reports²⁷⁶, these effects are usually greater when combined with other characteristics, such as network effects and economies of scale and scope²⁷⁷, as pointed out by multiple authorities in reports and rulings.

153. In their responses to the survey, authorities have emphasised the need for information on:

(i) data transparency and access to data by competitors²⁷⁸ (AUSTRALIA, BELGIUM, HUNGARY, KENYA);

²⁷² **MEXICO** - "The relevance of the type of data and its interaction in the competition lies in the fact that data is an input used by companies, therefore, to the extent that these are an indispensable and irreplaceable input, they can grant market power. Voluntarily provided user data is usually an input easily collected by companies, for example, when users create accounts. Conversely, data that derives from user interaction is more difficult to obtain or replicate".

²⁷³ Numerous reports reiterated these concerns and the possibility that the data entails new features that indicate dominance. To mention: Digital Competition Expert Panel, Unlocking Digital Competition: Report Of The Digital Competition Expert Panel, 2019, pp. 33–34; European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 29; Autorité De La Concurrence & Bundeskartellamt, Competition Law and Data, 2016, pp. 50–54; Commission "Competition 4.0," German Fed. Ministry for Economic Affairs and Energy, A New Competition Framework for the Digital Economy, 2019, p. 14; CADE, Working Paper no. 05/2020 Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, pp. 236–24.

²⁷⁴ "Article 5. Obligations for gatekeepers. In respect of each of its core platform services identified pursuant to Article 3(7), a gatekeeper shall: (a) refrain from combining personal data sourced from these core platform services with personal data from any other services offered by the gatekeeper or with personal data from third-party services, and from signing in end users to other services of the gatekeeper in order to combine personal data, unless the end user has been presented with the specific choice and provided consent in the sense of Regulation (EU) 2016/679;"

²⁷⁵" Article 6. Obligations for gatekeepers susceptible of being further specified. 1. In respect of each of its core platform services identified pursuant to Article 3(7), a gatekeeper shall: (a) refrain from using, in competition with business users, any data not publicly available, which is generated through activities by those business users, including by the end users of these business users, of its core platform services or provided by those business users of its core platform services or by the end users of these business users;"

²⁷⁶ ACCC, op. cit., p. 67–68; OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, p.14; Competition Bureau of Canada's statement regarding Thoma Bravo's acquisition of Aucerna, 2019; the European Commission's decision in the Google Shopping (AT.39740) case; and the US Department of Justice's 2013 Bazaarvoice Inc. complaint, 2021 Amazon complaint.

²⁷⁷ Economies of scope and the potential for market power stemming from data to be leveraged in new markets have also been considered by the European Commission in recent merger decisions regarding Microsoft/Linkedin (M.8124) and Google/Fitbit (M.9660). As to the latter: "... none of Google's competitors in online advertising has access to a database or data collection capabilities equivalent to those of Fitbit and it is not likely that they would acquire such assets without incurring into significant costs and in a timely manner".

²⁷⁸ As stated by the Autorité De La Concurrence & Bundeskartellamt, Competition Law and Data, 2016; and Comisión Federal De Competencia Económica, Rethinking Competition in the Digital Economy, 2018, p. 31: In particular, competitors are restricted in their ability to obtain the type of data key to competition, either because of

- (ii) data variety and durability (CHILE AND EUROPEAN COMMISSION);
- (iii) how fast data is processed (EUROPEAN COMMISSION);
- (iv) the size of dataset²⁷⁹ (MEXICO);
- (v) the quality of data and specificities of the dataset (EUROPEAN COMMISSION²⁸⁰, HUNGARY, MEXICO);
- (vi) how data is employed (MEXICO, SWEDEN);
- (vii) the structure of the market (SPAIN); and
- (viii) the existence of digital ecosystems (SWEDEN).

154. Authorities, in this context, have been concerned with data usage as an indicator of an incumbent firm's market power. Germany, for instance, has modified its laws to make data a component of its market power assessments²⁸¹. Similarly, Japan has updated its merger guidelines to consider the same phenomenon²⁸². The Chilean authority also revised its merger guidelines and added a section dedicated to data usage and accumulation and its importance to gauge the competitive effects of a deal²⁸³.

problems in generating/accessing such data or because of the low substitutability of some forms of data (e.g. location data is temporarily sensitive, as their value expires quickly).

²⁷⁹ **MEXICO** - "As stated before, we think that while the size of the data may arise antitrust concerns, but it is not sufficient, it is also important to analyse the nature of the platform as well as the way that such data is used. If the accumulation of data as a consequence of the merger allows the platform to increase its market power in the platform or in other markets or verticals the merger may be blocked. Also, there may be cases where the merger will allow the use of existing data in order to foreclose competitors (i.e. the merger may not increase the data collected, but may allow the merged company to use in a new way in order to foreclose other undertakings). For instance, in the Walmart-Cornershop case, the Commission concluded that the information that a grocery delivery platform collected could be used by a supermarket in order to foreclose competitors."

²⁸⁰ **EUROPEAN COMMISSION** - "The higher the variety; the velocity; the volume; and the value of a dataset, the more competitively significant and unique the dataset is. This information is taken into account to determine e.g., whether a dataset is an important input for the activities of a player in a related market."

²⁸¹ "Section 18: Market Dominance . . . (3) In assessing the market position of an undertaking in relation to its competitors, account shall be taken in particular of the following: . . . 3. its access to data relevant for competition."

²⁸²"In assessing the importance that data has for competition purposes or whether a business operator will become a potential influential competitor, following points will be taken into consideration: (1) what kind of data are held or collected by one of the parties (Company B) (2) how much data are held and how much data are collected by one of the parties daily from how wide an area (3) how frequently does one of the parties (Company B) collect data (4) how much are the data held or collected by one of the parties (Company B) relating to the improvement of the SERVICE provided by the other party (Company A) in the product market Also taken into consideration is how advantageous are the data held or collected by one of the parties "(Company B) as compared with the data that are available to the competitor (Company X) in the product market of the other party (Company A) from the perspectives (1) to (4) above." (P.57)

²⁸³ "There may also be horizontal effects in the strategic use of data. For example, the FNE (op. cit., p. 35–36) may analyse whether access to better data gives the merged entity a scale that, due to network effects, it can hardly be challenged by its rivals. Such concern will be counterbalanced by possible efficiencies derived from having better data. In addition, the possibility of interoperating and/or jointly using databases by digital platforms that merge, in the context of a specific case, could hinder the entry or expansion of competitors to/in the market, if it generates a significant competitive advantage that is not replicable by competitors. If the Transaction enables the attainment of market power, and thus allows for the collection of an even higher amount of information via the establishment of more invasive privacy policies, a feedback effect could occur, whereby the digital platform that gains a given advantage could tend to progressively strengthen its position in the market."

155. There seems to be some concern on the part of competition authorities that data accumulation could be an indication of market power²⁸⁴, possibly encouraging anticompetitive practices. Amongst the many concerns connected to incumbent firms' wrongful use of data, authorities and reports²⁸⁵ have expressed worry about abusive data collection²⁸⁶, which causes consumer data erosion²⁸⁷. Moreover, authorities have been paying special heed to the unilateral market foreclosure²⁸⁸ as it jeopardises data interoperability^{289_290}, self-preferencing²⁹¹, and others.

156. As to non-horizontal mergers, authorities have shown concern with acquiring companies accessing competitively sensitive data, as it can offer significant competitive

²⁸⁴ **TURKEY** - "In digital markets, data is an important input for online services, production processes, logistics, smart devices and artificial intelligence and therefore the power of an undertaking in terms of data provides significant competitive advantage for that undertaking. As a result, the data held by undertakings may lead to significant market power and if some undertakings are unable to collect similar data or buy a data source of this kind, they may face barriers to entry in terms of volume and diversity. Thus, market power assessments specifically in digital market must also take into account the data platforms may or may not possess. The data power and data collection opportunities undertakings would have in the digital markets following merger and acquisition transactions must be examined in terms of their effect on the competition in the market, as well. However, in practice, there have been no merger and acquisition analyses evaluating the data accumulation of undertakings, to date."

²⁸⁵ U.S. House of Representatives, op. cit., p. 51.

²⁸⁶ **COLOMBIA** - "Data accumulation can generate economies of scale in the sense that through tools such as data science important insights can be obtained. These insights can allow the apps to price discriminate and to do a better segmentation to all the sides of the digital market".

²⁸⁷ The CMA analysed the impact of changes in privacy policies in the scope of mergers of the digital sector: "In the context of this Merger, the CMA considered the impact of recent and anticipated regulatory developments and third-party platform changes to privacy policies which impact tracking technologies159 on Facebook's data advantage and significant market power in online display advertising as assessed by the CMA in its Market Study. (Anticipated acquisition by Facebook, Inc. of Kustomer, Inc.' (Facebook/Kustomer, paragraph 142) (9 November 2021)." In this respect, the European Commission also considers "privacy as a dimension of competition in digital markets in its decisional practice" (M.8124 – Microsoft/LinkedIn, para. 350).

²⁸⁸ **CMA** – "Therefore, in its assessment of competition concerns, the CMA may consider for example whether there may be vertical effects through a merged entity restricting access to data, where that data may be an important input, as a mechanism of foreclosing rivals."

²⁸⁹ **BELGIUM** - "Different types of data might raise different competition concerns: some might be intended or lead to increased transparency some might be intended or lead to strengthened dominance (e.g. competitors of an already dominant player might be foreclosed to extremely relevant new data, leading to further enforcement of the dominant position)."

²⁹⁰ The CMA updated its merger guidelines to include restricting access to data as a potentially anticompetitive effect: "7.13. The CMA may consider a wide range of mechanisms through which the merged entity could potentially harm its rivals when supplying inputs. These may include, for example: refusing or restricting supply, increasing prices, reducing quality or service levels, deteriorating product interoperability, slowing the rollout of upgrades, restricting licensing of intellectual property, shutting down APIs,120 reprioritising R&D spending, or limiting access to data. The CMA's focus will be on understanding if collectively these would allow the merged entity to foreclose its rivals, not on predicting the precise actions it would take."

²⁹¹ "This combination of self-preferencing and market power may harm competition by raising barriers to entry and expansion and by diminishing quality and innovation in different markets. Users usually benefit from higher interoperability and lower switching costs because the associated increases in competition force companies to innovate. At the same time, dominant companies have incentives to restrict access or interoperability as a way to protect their ecosystems." Autoridade Da Concorrência, Ecossistemas Digitais, Big Data e Algoritmos, 2019, p. 69–70 and Comisión Federal De Competencia Económica, op. cit., p. 27–28.

advantages^{292_293}, as seen in the Walmart/Cornershop case²⁹⁴ adjudicated by the Colombian authority.

157. As mentioned by the European Commission in the case Microsoft/LinkedIn (M.8124), horizontal competition concerns can derive from the combination of datasets²⁹⁵. When this is the case, some reports suggest that authorities should consider the type of data, how frequently it has been accessed, and the costs incurred in this access. Moreover, agencies should focus on data that cannot be easily replicated, such as voluntary and observed data, as they are more likely to indicate market power²⁹⁶.

158. Horizontal competition concerns as a result of data accumulation leading to a strengthening of a dominant position has also been investigated more recently in Google/Fitbit (M.9660) and Meta (formerly Facebook)/Kustomer (M.10262). In Google/Fitbit, this has led the Commission to conclude that the data accumulation would lead to a significant impediment on effective competition, and a "data silo" commitment.

159. Considering the relevance of data for some digital markets, some measures can mitigate anticompetitive effects derived from the data accumulation by dominant firms. It is important to notice, however, that in many cases some kinds of data are not necessary for effective competition and sharing them can breach privacy laws and even create

²⁹² European Commission – Case M.8788 – Apple/Shazam (p. 41): "In this context the Commission has assessed whether, through the acquisition of control over the Shazam app and Shazam's database, Apple could gain access to certain data on its competitors, and in particular on Spotify, in the markets for digital music streaming apps in the EEA and in the Referring States and whether this could lead to any non-horizontal non-coordinated anticompetitive effects."

²⁹³ CADE Merger case no. 08700.003969/2020-17. Vote by Commissioner Paula Farani: As obtaining sensitive data and information from competitors may represent an important competitive advantage in developing commercial and competitive strategies, one should look into the nature of shared information, the market dynamics, and the means used to obtain information. Hence, it is possible to determine how likely the data access and use generate anticompetitive practices and effects. Likewise, Commissioner Ravagni stated "188. To assess these issues, we should determine (i) how much access to the data the merged company will have, (ii) who will own the data, (iii) and if access to this information represents undue competitive advantage." CADE Merger case no. 08700.003969/2020-17. Vote by Commissioner Sergio Costa Ravagnani.

²⁹⁴ The Colombian antitrust body stressed these concerns in the ICN MWG Webinar on the control of data, market power, and potential competition in merger reviews.

²⁹⁵ European Commission - M.8124 Microsoft/LinkedIn - "(179) Assuming such data combination is allowed under the applicable data protection legislation, there are two main ways in which a merger may raise horizontal issues as a result of the combination under the ownership of the merged entity of two datasets previously held by two independent firms. First, the combination of two datasets post-merger may increase the merged entity's market power in a hypothetical market for the supply of this data or increase barriers to entry/expansion in the market for actual or potential competitors, which may need this data to operate on this market. Competitors may indeed be required to collect a larger dataset in order to compete effectively with the merged entity than absent the merger. Second, even if there is no intention or technical possibility to combine the two datasets, it may be that pre-merger the two companies were competing with each other on the basis of the data they controlled and this competition would be eliminated by the merger."

²⁹⁶ Heike Schweitzer, Justus Haucap, Wolfgang Kerber & Robert Welker, German Federal Ministry For Economic Affairs And Energy, Modernising The Law On Abuse Of Market Power: Summary Of The Report's Recommendations, 2018, p. 4.

anticompetitive effects²⁹⁷. Against this background, data sharing should be carried out carefully as different types of data justify different levels of access.

160. Other forms of allowing data access to competitors have been discussed, such as data portability. Although this is a mechanism provided for in data protection laws, some studies highlight that it was developed to accomplish the specific purposes of individuals that wanted to switch providers for a specific service, not for an entire market, which would be the scope of competition law²⁹⁸.

161. Finally, much has been said about the importance of creating interoperable systems that promote the free flow of data between applications²⁹⁹. Interoperability allows platforms and applications developed by different companies to communicate, increasing their value to users. Currently, interoperability is heralded by specific companies and industry-wide standardisation. As interoperability increases a product's attractiveness for consumers, developers gain incentives to cooperate—which is especially true for products that are new and need to be established in the market. Interoperability measures may promote competition between digital platforms depending on how these are conceived. It enables users to preserve network effects in new services and within digital platforms, allowing them to combine complementary services from different providers³⁰⁰.

5. DIGITAL ECOSYSTEMS

162. Another very common feature of the digital economy that can indicate market power is the creation of digital ecosystems, i.e., the development of product lines and services complementary to those already in place³⁰¹. Such as different business models, there are different kinds of ecosystems³⁰².

²⁹⁷ CADE, Working Paper no. 05/2020 Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 110

²⁹⁸ European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 81; Commission "Competition 4.0," German Fed. Ministry For Economic Affairs And Energy, A New Competition Framework For The Digital Economy, 2019, p. 39.

²⁹⁹ "Interoperability refers to the ability of different digital services to work together and communicate with one another." OECD, Data portability, interoperability and digital platform competition, OECD, Competition Committee Discussion Paper, 2021, p. 12.

[&]quot;Similar to data portability but with real-time, potentially standardised access for both the data subject/machine user and entities acting on his or her behalf. Existing data interoperability mechanisms rely on privileged APIs, when a user authorises a service B to access his or her data through service A's API, e.g. through an 'access token'." (European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 81).

³⁰⁰ OECD, Handbook on Competition Policy in the Digital Age, 2022, P. 54

³⁰¹ OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020, p. 4

³⁰² "1. Multi-actor ecosystems: Formally, and drawing on the term's ecological foundations, an ecosystem is a community of independent parties. In economic terms, this could apply to any situation where there is 'joint value creation', such that firms

163. As seen above, digital markets have characteristics that facilitate the creation of large conglomerates, such as economies of scale and scope³⁰³, portfolios power ^{304_305}, network effects, complementary services, technological synergies, amongst others³⁰⁶. Furthermore, due to winner-takes-all/most dynamics, competition concerns emerge from incumbent players' digital ecosystems as they allow for more control over users and, as a consequence, the processing of a larger dataset, including from diverse sources, which ultimately may increase market power.

164. Against this backdrop, digital ecosystems offer the opportunity for companies to expand their market power to adjacent markets, giving them competitive advantages over potential competitors and reducing competition in the market. They can also represent an entry barrier, as they may function as informational gatekeepers, protecting their most profitable services³⁰⁷.

165. Moreover, digital ecosystems can raise entry barriers for players that, to compete, must offer a wide range of services and features to encourage user migration. In this regard, some

effectively work together to create value that no single firm could have created alone. Much of the academic work on ecosystems in the business strategy arena focuses on this definition. 2. Multi-product ecosystems: In the digital context, however, the term ecosystem is often used to relate to the collection of products and services offered by a single corporate organisation, often through a variety of separate divisions or businesses. This is important because there are typically economic links between these products and services. On the demand side, they can be substitutes (such as Facebook Messenger and Whatsapp), complements (such as Apple devices and the iCloud) or even effectively inseparable (such as Android and Google Play). There can also be important supply side synergies." (OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020, p. 2). "Also a multi-actor ecosystem is a community of independent parties, on which much of the academic work on ecosystems in the business strategy arena focuses. Digital platforms are almost inherently multi-actor ecosystems. In the digital context, however, the term of multi-product ecosystems is often used to relate to the collection of products and services offered by a single corporate organisation, often through a variety of separate divisions or businesses" (Ibid, p. 2–3).

³⁰³ Digital ecosystems of complementary products and services centred around core service offer a line of products and services with a technological linkage increasing the complementarity between them. Large economies of scope and scale across markets and network effects facilitate the development of ecosystems on the supply side, whereas consumers synergies due to technological linkages play an important role on the demand side. (ibid, p. 2)

³⁰⁴ **SPAIN** - "Portfolio power is not so easy to disentangle from pure economies of scope. And economies of scope are very frequent in digital markets. From the supply side, many digital services share the same inputs (data, IT skills and human resources...), i.e. they have cost synergies. From the demand side, consumers value ecosystems and integrated services. So a merger of this type may increase market power (be it through portfolio power or economies of scope)".

³⁰⁵ **KENYA** - "Generally, the Authority assesses portfolio power in conglomerate mergers by analysing possible foreclosure resulting from conglomerate mergers".

³⁰⁶ The Paper "Merger control in the digital age – Challenges and development perspectives" published in 2022 by the Bundeskartellamt gives a comprehensive overview over possible theories of harm (pp.24-34). Available at https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Diskussions_Hintergrundpapiere/2022/Working_Group_on_Competition_Law_2022.pdf

³⁰⁷ Ibid, p. 4.

reports indicate that, for a new company to be competitive, it should offer all solutions already offered by the incumbent firm³⁰⁸.

166. However, digital ecosystems can benefit consumers by making connections more convenient through a standalone set of applications. Moreover, they integrate many different products and services into a single environment, which may create efficiencies and improve consumers' general experience, whether through lower prices or a larger variety of services. Consumers tend to purchase products from the same provider and benefit from the facilities that come from using applications with familiar patterns and mechanisms³⁰⁹.

167. Since digital ecosystems have ambiguous effects on the market, competition authorities usually analyse conglomerate mergers on a case-by-case basis, considering the impact of the merger on the market and market characteristics, especially: (i) economies of scale and scope, (ii) marginal costs, (iii) network effects, (iv) potential technical tying³¹⁰, (v) feedback loops, (vi) essential components³¹¹, (vii) portfolio synergies³¹², and (viii) switching costs³¹³. As authorities also pointed out, the analysis should be done case by case and it may

³⁰⁸ Commission "Competition 4.0," German Fed. Ministry For Economic Affairs and Energy, A New Competition Framework for the Digital Economy, 2019, p. 16; CADE. Working Paper no. 05/2020 Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 13

³⁰⁹ OECD, Some Economics of Digital Ecosystems – Note by Marc Bourreau, 2020, p. 4.

³¹⁰ Technical tying, which as noted above makes a firm's tying or bundling strategy more credible, could also be particularly common in digital markets due to the ability of firms to incorporate ties into their product design (such as limited compatibility or pre-installation). In fact, it may be particularly easy for firms to implement technical ties by limiting the interoperability of competitors' products within a system (or simply to refrain from undertaking the effort or sharing the information necessary for interoperability, which can be distinguished from tying). The degradation of interoperability was a key theme in several recent mergers, including Microsoft/LinkedIn and Broadcom/Brocade, as well as Intel/McAfee, and Qualcomm/NXP. OECD, Roundtable on Conglomerate Effects of Mergers - Background Note by the European Comission, 2020 P. 24

 ³¹¹ OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018, p. 24
 ³¹² OECD, Portfolio Effects in Conglomerate Mergers, 2002.

³¹³ "Switching costs present another barrier for potential market entrants. In many cases, large technology firms can maintain market power in part because it is not easy for users to switch away from the incumbent's technology. A market exhibits 'lockin' when switching costs are sufficiently high that users stay with an incumbent firm rather than switch to a firm whose product or service they would prefer. Over time, lock-in tends to reduce competition, deter market entry, and may even worsen data privacy." (ICN, op. cit., p. 41–42)

be relevant to determine if the offered product is essential or if it is the dominant choice in the market³¹⁴ since ecosystems affect users' choices and also affect the competition process^{315_316}.

168. Competition authorities are aware of the impact digital ecosystems can have on the market. Germany, for instance, has changed its legislation to intervene earlier and more effectively where competition is threatened by companies with paramount significance for competition across markets. This newly introduced Section 19a particularly aims at the practices of large digital companies and their digital ecosystems. So far, Germany has issued four designation decisions, concluding that Google, Meta, Amazon and Apple are of paramount significance for competition across markets. The designation decisions allow the Bundeskartellamt to prohibit certain conduct under Section 19a (2), such as self-preferencing of own services, envelopment or creating or raising barriers to market entry by processing data relevant for competition, to the extent that the respective conduct is not objectively justified.

169. The OECD³¹⁷ suggests the assessment of these effects on competition should consider the existence and nature of network effects, the existence of multi-homing, the type of data collected, and its value added to the offered service.

170. Even though, as explained above, not all digital markets share all those characteristics, there is a significant consensus that digital markets usually involve multi-sided markets with a predominant innovation process, network effects, and data accumulation. It is also considered that platforms have increasingly consolidated their market power and expanded into several ecosystems. This scenario has caught the attention of competition authorities.

³¹⁴ **SPAIN** - "As previously stated this will depend on the specific circumstances of a case. Some aspects that could prove to be relevant are (i) the extent to which a given product in the ecosystem is considered a 'must have' or is widely preferred by consumers (ii) whether consumers face switching costs due, for instance to the 'usability' of a given ecosystem or to the cost of learning to use a new ecosystem (iii) the existence of barriers to entry. In addition, some consumers may actually prefer to buy a bundle of complementary products."

³¹⁵ **SWEDEN** - "The SCA does consider that ecosytems can make it harder for rivals to compete as it increases the switching cost to another digital platform. For example, in the SCA's sector study on digital platforms, it was found that digital ecosystems related to mobile app stores does make it more difficult for consumers to switch between platforms. Ecosystems may also increase the platforms intermediation power towards business users, which makes it harder for rivals to compete. In order to understand if and how the ecosystem may affect rivals' capacity to compete it is important to understand the functioning of the core service and complementary products/services, the ecosystem itself, and how the ecosystem affects consumers' and business users' behaviour. The SCA therefore spends a significant amount of time researching any potential ecosystem's relevance for a specific case. In doing so, the SCA will, for example, also analyse the prevalence of multihoming and strength of any network effects".

³²¹ **TURKEY** - "In order to understand if and how the ecosystem may affect rivals' capacity to compete it is important to understand the functioning of the core service and complementary products/services, the ecosystem itself, and how the ecosystem affects consumers' and business users' behaviour."

³¹⁷ OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020, p. 2.

171. Also, it is mentioned the importance of considering that several digital markets are zero-pice markets, what calls for the analysis of non-price effects of the merger. Since those mergers usually consider the provision of non-monetary-price products and services while evaluating the deal, it might be necessary to assess the dynamic effects of the merger. According to the OECD³¹⁸, in those cases, authorities must not only consider the immediate effects of the mergers, such as a price increase or reductions in quality or variety, but also be open to further dynamic concepts, analyzing how the incentives of the companies might change if the merger is unconditionally cleared.

172. Because of that, especially in dynamic and conglomerate markets, it may be necessary to analyze further how the merger would (i) allow the companies to protect their core business, (ii) allow the acquirer to leverage market power from one market to another; (iii) increases entry and expansion barriers; (iv) decreases access and interoperability; (v) enhance data accumulation; (vi) remove incentives for companies to invest in innovation.

173. Although defining, measuring, and incorporating quality dimensions in an effectsbased analysis may be challenging, as recognized by the OECD³¹⁹, quality competition is crucial in data-driven multi-sided markets. Moreover, in these markets especially, the most harmful effects of mergers can often be nonprice related.

174. This kind of analysis will require assessing future market developments, which might impose some challenges. For example, defining the time frame to assess future market developments in merger assessment might be difficult to evaluate. The Lear Report, for example, indicates that *"the time frame of two years, which represents the default for the assessment of some future market developments, such as entry, within merger investigations in the UK, may be somewhat limiting and could be extended when dealing with mergers in digital markets: even in the fastmoving digital landscape, becoming successful can take longer than two years"³²⁰.*

175. In conglomerate mergers, it might also be relevant to consider if the acquired company has scarce capabilities. In this case, this kind of merger may add concerns regarding potential

³¹⁸ "Opening up a merger assessment to non-price effects may require looking beyond immediate effects, such as price increases, or reductions in quality or variety. Rather, a dynamic analysis of how firm incentives will change, and the degree to which potential competition will emerge to challenge a post-merger firm, in terms of innovation efforts, quality or variety positioning, and even privacy protection, may be needed. This will be difficult, as described in the sections above, due to the uncertainty of the future, and the likely lack of information about potential future innovation or firm entry, not to mention the challenge of evaluating how realistic potential future competitors' strategies are likely to be". OECD, Considering non-price effects in merger control – Background note by the Secretariat, p.41, 2018

³¹⁹ "Measuring competition can be particularly challenging and is the main reason why quality considerations/qualitative efficiencies are rarely taken into account". OECD, The Role and Measurement of Quality in Competition Analysis, p. 129, 2013.

³²⁰ Lear Report. Recommendations, p. iv, 2019.

and dynamic competition, be it in current and/or future markets. In this scenario, the merger could block or enhance the barriers to third parties competing with the merging company.

176. Conglomerate mergers, especially in digital markets characterized by dynamic effects and fast, innovative nascent markets, pose several challenges to the competition authorities. This is especially relevant when there are several discussions about the benefits their efficiencies might have. As pointed out by the OECD, those mergers can be complex and involve firms with several different types of products and lines of business. Due to that, and once conglomerate mergers incentivize the development of new tools to catch and capture the consumer's attention, it is necessary to evaluate other theories of harm, such as horizontal and vertical theories³²¹. Hence, the OECD suggests that *"if the merging firms will have strong market power (or a lack of effective competition) in at least one of the markets affected by the merger, and the other markets exhibit significant entry barriers, economies of scale, or network effects, then the following risk factors should be assessed:*

- The products involved are complements and there are alternative uses or repeated purchases (e.g., due to upgrades) of one of the products.
- The products involved are weak substitutes or unrelated, but they feature substantial overlaps in consumers.
- Bundling or tying is common in the affected markets, or at least one of the firms has engaged in bundling or tying in other markets.
- Technical bundling or tying is feasible.
- The nature of the relationship between the merging firms and their consumers could make contractual bundling or tying credible.
- There is a significant likelihood that one of the markets involved in the merger could be used as a stepping stone to challenge the merging firms' market power in another market.
- The merger will increase the symmetry among conglomerate firms in terms of the markets in which they compete, or may enable the differentiation of bundles focusing on segmented consumers (giving rise to potential co-ordinated effects).
- There are indications, due for example to public comments by the merging firms' management, that the post-merger firm's strategy will centre around combining data sets, cross-subsidising markets and denying rivals network effects.
- There have been several past occurrences of vertical restraints in the markets affected by the merger."

³²¹ "In particular, these mergers can be complex and involve firms with several different types of products. Thus, competition authorities will need to separate potential conglomerate effects related to bundling or tying from concerns more appropriately addressed under horizontal (e.g. potential future competition) or vertical (e.g. input foreclosure) frameworks, and to consider prioritising the different theories of harm". OECD, 2020 Roundtable on Conglomerate Effects of Merger – Background note by the Secretariat, p.36

177. The Mexican authority also listed some relevant aspects to consider in evaluating the effects of a conglomerate merger:

- (i) The agency should provide evidence of significant market power in many markets.
- (ii) There should be a high degree of complementarity and a clear way to preserve the market power of an ecosystem.
- (iii) There should not be important competitors.
- (iv) There may be other undertakings with a different ecosystem that may expand and enter the market.
- (v) The nature of the market is disruptive; therefore, new platforms with a different scope can arise and become relevant competitors.

178. In examining conglomerate mergers³²², when competition issues are identified, some measures can be taken to promote competition, such as ensuring interoperability across services and products³²³ or requiring that products and services offered by third parties interact freely with the dominant ecosystem³²⁴.

179. However, reports indicate authorities should be careful when imposing remedies in conglomerate mergers, since (i) unlike horizontal and vertical mergers, conglomerate mergers do not lead to merging parties directly losing competition in the same relevant market; (ii) vertical and conglomerate mergers usually leave ample room to externalities; and (iii) such mergers may significantly restrict competition mainly through coordinated and non-coordinated effects³²⁵.

³²² The definition of conglomerate merger by the Brazilian Competition Authority: "31. Hence, as it is not an essential input, services are of a complementary nature and there is no vertical integration between them since they do not have a dependent relationship within the same supply chain 33. This is, therefore, a concentration of the conglomerate type: the involved firms are complementary (i.e. are not in a purely horizontal or vertical relationship) and operate in fairly close or complementary markets. 34. In principle, transactions of this nature do not give rise to substantive competition concerns but, in specific cases, they can negatively affect the market and consumers alike. In the judgement of Merger no 08700.001908/2019-73 (Applicants: IBM and Red Hat), I further commented on this type of transaction". (Brazil, CADE. Merger no 08700.000059/2021-55 (2021), decision by Commissioner Paula Farani).

³²³ Some reports even suggest an assumption or obligation of interoperability whenever a dominant firm has a data base that competitors cannot replicate." (European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 4 and Commission "Competition 4.0," German Fed. Ministry for Economic Affairs and Energy, A New Competition Framework for the Digital Economy, 2019, p. 38.)

³²⁴ **EUROPEAN COMMISSION** - "For example, in case M.9660 – Google/Fitbit, it was important to ensure that wrist-worn devices competing with Fitbit would be allowed to continue to interact with Google's Android ecosystem (and smartphones, in particular) since Fitbit entered the ecosystem following the transaction. In that case, a specific Android API access remedy granted interoperability: it ensured Android's application programme interfaces (APIs) would remain open and interoperable with third parties (e.g. providers of browsing, notification, and messaging services)".

³²⁵ CADE. Merger case no. 08700.003969/2020-17. Decison by Commissioner Sergio Costa Ravagnani.

180. As to coordinated effects, conglomerate mergers may give rise to coordination by reducing the number of competitors, which facilitates tacit collusion—whether interaction between competitors of several markets has been facilitated or because it may reduce the effectiveness of anti-coordination mechanisms³²⁶. Coordinated effects may also have a negative impact on innovation³²⁷, as later discussed.

181. Furthermore, unilateral non-coordinated effects³²⁸ give rise to the concern that the firm may abuse its ecosystem dominant position after the merger, foreclosing the market for rivals. As pointed out in several reports³²⁹, these practices may happen when there is "(*i*) the prominent role of tying³³⁰ and bundling³³¹, and (*ii*) the importance of market power or indeed the absence of effective competition in at least one market³³²".

182. This is because the combination of complementary goods gives the newly formed company the ability and incentive to extend³³³ its market power to other markets, which hinders rivals' ability to compete³³⁴. Moreover, it is said to be crucial to assess the market

³²⁶ CADE, Merger case no. 08700.003969/2020-17. Decision of the Superintendent-General.

³²⁷ OECD, Roundtable on Conglomerate Effects of Mergers - Background Note by the Secretariat, 2020, p. 19; OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018

³²⁸ About unilateral effects, the European Commission pointed out in Case M.9660 (Google/Fitibit) that: "(711) however, foreclosure effects may arise when the combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another closely related market by means of tying or bundling or other exclusionary practices. While tying and bundling have often no anticompetitive consequences, in certain circumstances such practices may lead to a reduction in actual or potential competitors' ability or incentive to compete. This may reduce the competitive pressure on the merged entity, allowing it to increase prices. In assessing the likelihood of such a scenario, the Commission examines, first, whether the merged firm would have the ability to foreclose its rivals, second, whether it would have the economic incentive to do so and, third, whether a foreclosure strategy would have a significant detrimental effect on competition, thus causing harm to consumers."

³²⁹ OECD, Vertical Mergers in the Technology, Media and Telecom Sector: Background Note by the Secretariat, 2019 and OECD, Roundtable on Conglomerate Effects of Mergers - Background Note by the Secretariat, 2020.

³³⁰ Tying occurs when a firm requires its consumers to purchase one or more "tied" products if they wish to purchase a "tying" product. This can be accomplished through technical tying – for example limiting the compatibility of a competitor's products, or through contractual tying, which obligates consumers to purchase the products together.

³³¹ Bundling occurs when a firm offers multiple products together as a single package. It can do so either through pure bundling, which means that the products are only available for sale together, or mixed bundling, which means that the products can be purchased separately but are available together, generally at a discount. Incomplete mixed bundling refers to situations in which a firm offers some but not all of the products for sale separately, i.e. in addition to the bundle. This could have the same impact as pure bundling if one of the products not sold separately is the monopoly product.

³³² Ibid, p. 4.

³³³ **TURKEY** - "Undertakings' operation in the form of an ecosystem that provide more than one different and/or related services in the digital markets is presented as a facilitating structural feature which allows them to leverage the power they hold in one market to transfer that power into a different market. The features in question may constitute barriers to entry for those undertakings that lack these tools, and may cause incumbent platforms to gain market power or reinforce their existing market power due to a leveraging effect. However, there are no decisions that address portfolio power among those taken on mergers and acquisitions in the digital markets."

³³⁴ CADE. Merger case no. 08700.001908/2019-73 (2019), Vote by Commissioner Paula Farani.

structure, considering the theory of harm arising from conglomerate mergers requires the company has significant market power in at least one of the markets affected by the transaction.

183. Authorities' main concerns with conglomerate mergers, as found in their respective merger guidelines³³⁵, have been summarised in the table below:

JURISDICTION	FORECLOSURE THEORIES OF HARM	COORDINATED EFFECTS	EFFICIENCIES
Australia	Risk of foreclosure through bundling and tying assessed in terms of: ABILITY (market power, must-have products, differentiation, brand loyalty) (p. 26); INCENTIVES (whether benefits outweigh lost sales, economies of scale) (p. 27); EFFECTS (proportion of firms to be foreclosed and those to remain, proportion of consumers likely to continue purchasing competing products, barriers to entry, whether entry will only be possible if firms provide a full range of products) (p. 28)	Assessed based on usual conditions (ability/incentive to reach agreement, detect deviations, threat of punishment, lack of competitive constraint (pp. 30–31)	Better integration, increased convenience, reduced transaction costs (p. 25)
CANADA	Assessed in terms of whether post-merger firm will have the ability and incentive to "leverage a strong market position from one market to another by tying products together." (p. 37)	May encourage coordination through multimarket contact (p. 37)	
EUROPEAN COMMISSION	Merger may "confer on the merged entity the ability and incentive to leverage a strong	120. One way in which a conglomerate merger may influence the likelihood of a coordinated outcome in a given market is	Economies of scope, either production or

³³⁵ Australian Competition & Consumer Commission (2008); Merger Guidelines, Competition Bureau of Canada (2011), Merger Enforcement Guidelines; European Commission (2008), Guidelines on the assessment of nonhorizontal mergers under the Council Regulation on the control of concentrations between undertakings; Japan Fair Trade Commission (2019), Guidelines to Application of the Antimonopoly Act Concerning Review of Business Combination; Korea Fair Trade Commission (2017).

JURISDICTION	FORECLOSURE THEORIES OF HARM	COORDINATED EFFECTS	EFFICIENCIES
	market position from one market to another by means of tying or bundling or other exclusionary practices. (p. 17)	by reducing the number of effective competitors to such an extent that tacit coordination becomes a real possibility. Also when rivals are not excluded from the market, they may find themselves in a more vulnerable situation. As a result, foreclosed rivals may choose not to contest the situation of co-ordination, but may prefer instead to live under the shelter of the increased price level. 121. Further, a conglomerate merger may increase the extent and importance of multi-market competition. Competitive interaction on several markets may increase the scope and effectiveness of disciplining mechanisms in ensuring that the terms of co-ordination are being adhered to. (p. 20)	consumption side. (P.12)
Germany ³³⁶	Strengthening or creation of a dominant position by hindering competitors and preventing entry. Other Theories of Harms: Elimination of "fringe competition" from imperfect substitutes: recognizes that this is likely only to strengthen rather than create a dominant position (p. 58) Elimination of potential competitor (p. 58) Portfolio effects: risks if consumers value variety and one-stop shopping (p. 61)	Strengthening collective dominance by making it easier to reach terms of co- ordination, increasing market transparency, enhancing ability to publish deviators and reduce or eliminate constraints from potential competitors (pp. 61-62)	

³³⁶ A more recent overview over possible theories of harm was published by the Bundeskartellamt in September 2022:

https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Diskussions_Hintergrundpapiere/2022/Working_ Group_on_Competition_Law_2022.pdf (pp. 24-34)

JURISDICTION	FORECLOSURE THEORIES OF HARM	COORDINATED EFFECTS	Efficiencies
	Increase of market power: by "strengthening the financial or industry specific resources of the company" (p. 61)		
Japan	Conglomerate mergers generally not considered harmful unless they enable foreclosure or exclusion (p. 53) ³³⁷ .	Potential for coordinated effects assessed (p. 58)	Elimination of potential competition by limiting access to inputs in related markets, such as data, which could be used to challenge a firm's position in the future (p. 57)
Korea	Conglomerate mergers between firms that do not produce complements or substitutes are granted a simplified review, but "mixed combinations" (conglomerate mergers) can result in the exclusion of competitors by limiting their access to common inputs such as raw materials and technical expertise, and may increase entry barriers (pp. 14–15)		Elimination of potential competition (considering potential for entry, the likelihood that the firm would have entered the market but for the merger) (pp. 14–15)

6. <u>METRICS AND TESTS</u>

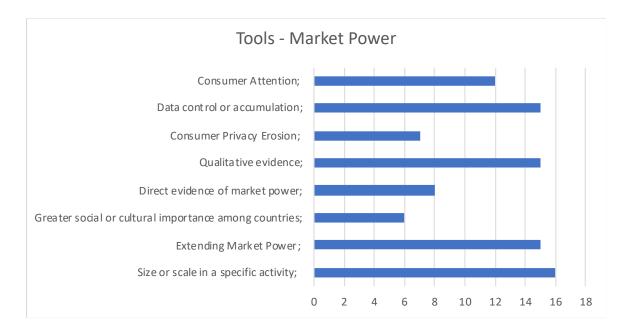
184. As seen above, the nature of network effects, the existence of complementary products, and even the competition dynamics are, to a certain extent, distinct in digital markets. Multsided markets, large amounts of data, different business models, and digital ecosystems have become the main concerns for many competition authorities.

³³⁷ Assesses the risk of foreclosure through "combined supply" in terms of: **ABILITY**: most pronounced with high complementarity among products and large share in one market; **INCENTIVE**; **EFFECT**: whether it leads to exit or makes entry more difficult; particular focus on risk that post-merger firms will withhold confidential information necessary for enabling interconnectivity from competitors (pp. 55–56)

185. There has been growing interest in assessing the market power of vertical structures and digital ecosystems and determining how these structures can take privileged positions by exploiting information asymmetries between market segments to extract the most of their activities.

186. Several reports have attempted to suggest which tools could gauge a player's market power, using nomenclatures that vary according to each market segment: bottleneck power³³⁸, intermediation power³³⁹, strategic market status³⁴⁰, unavoidable trading partner³⁴¹, and gatekeeper³⁴².

187. Considering this, and to find which tools authorities have been using to assess digital companies' market power, the survey asked what qualitative elements might be considered during merger review to find out which qualitative tool could be employed to assess market power.



188. Sweden, for its part, mentioned it uses other metrics, such as network effects and multi-homing (if it is a multisided platform/market) to examine market power.

³³⁸ Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report, In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 105–106; The Netherlands Auth. For Consument & Markt, Price Effects Of Non-Brand Bidding Agreements In The Dutch Hotel Sector, 2019, p. 40

³³⁹ Competition Policy for the Digital Era (2019), p. 49, Competition 4.0 Report, German Ministry Industry, p. 2

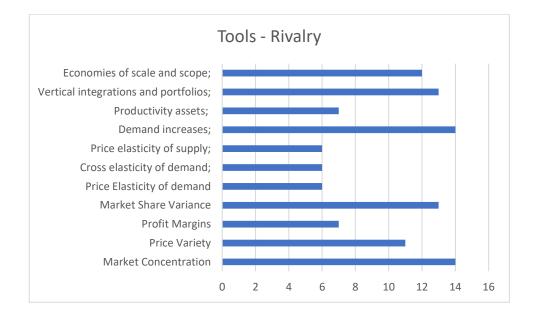
³⁴⁰ Digital Competition Expert Panel, Unlocking Digital Competition: Report Of The Digital Competition Expert Panel, 2019, p. 10, 55, 59; CMA, Competition And Markets Auth., Online platforms and digital advertising market study, 2020, p. 335.

³⁴¹European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 49.

³⁴² US House of Representatives, op. cit., p. 39.

189. The diversity of responses shows how difficult it has been for competition authorities to understand the new digital reality. The survey also shows how some tools currently employed in traditional markets may still be considered adequate in several digital markets but may also be obsolete in some others.

190. Furthermore, as a way to measure the efficiency of metrics applied in traditional markets, surveyed authorities indicated which tools and metrics they use to gauge rivalry in a merger review. These were their replies:



191. As multiple authorities pointed out (such as the UK³⁴³ and Australian ones), traditional metrics may not be suitable to assess a digital market. There seems to be a need for new metrics to evaluate market power in the digital sector. Such need comes from the fact that these markets are dynamic and have distinguishing features.

192. Although authorities use static competition parameters founded on prices and quantitative criteria to analyse traditional markets, they can lead to inaccurate assessments in digital markets. Therefore, some recommend that digital merger review should also consider aspects that go beyond the scope of the static criteria commonly used to determine market power³⁴⁴.

³⁴³ **CMA** - "The CMA will consider a range of qualitative and quantitative evidence relating to the relevant parameters of competition. In digital markets, the main parameters of competition tend to be non-price. Therefore, the CMA will adopt non-price metrics to assess rivalry".

³⁴⁴ As the European Commission stressed: "Such damage could involve decreased choice, increased prices, decreased quality and/or decreased innovation, to the detriment of consumers and businesses and of productivity and economic growth."

193. To conclude, there seems to be a relative consensus between reports and administrative rulings: merger control should increasingly adopt qualitative metrics, focusing on issues such as entry barriers, rivalry, potential competition, innovation, and other non-price effects. Authorities would benefit from adopting a more dynamic view of competition, not only measuring the effects of a merger in the short term but also taking into account matters related to innovation, quality, data privacy, amongst others, as discussed next.

v. ASSESSING NON-PRICE EFFECTS IN MERGER REVIEW

194. Quality has been mentioned as an important feature for consumers, affecting the competitive dynamics of the market, in several reports and decisions. The quality of a product depends on a wide range of variables³⁴⁵, which includes functionality, design, beauty, durability, place of purchase, performance of the product, reliability, and privacy. These features can have an impact as relevant as, or greater than, price^{346_347}.

195. The OECD³⁴⁸ explains that quality refers to how a consumer values a given good. It is a multidimensional, subjective concept since different consumers may value certain product characteristics very differently. Quality may also have different effects on competition³⁴⁹.

196. Transactions in digital markets can particularly affect the quality of products and the incentives and capacity of companies to invest in innovative processes, ultimately reducing innovation. This is said to be one of the reasons why authorities' merger reviews should not exclusively focus in giving a diagnosis founded on quantitative criteria. Ideally, merger review should make a dynamic prognosis by assessing criteria related to the future of the

³⁴⁵ "Quality often plays a central role in consumer decisions, and therefore the competitive dynamics of markets. The term quality can be defined as the range of product characteristics, other than price, which affect the value of the product to consumers. These characteristics can include functionality, durability, reliability, convenience of purchasing locations, design or aesthetic appeal, performance and safety." OECD, The Role and Measurement of Quality in Competition Analysis, 2013.

³⁴⁶ OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018, p. 24. Also p. 37: "Considering price and non-price dimensions of competition can therefore require: (i) Determining the overall impact of price and non-price effects on consumer welfare, for example by attempting to quantify the value to consumers of a given non-price effect; (ii) Dealing with short- and long-term effects that have opposing impacts on consumer welfare ; (iii) Determining the weight to be given to qualitative evidence of a given non-price effect".

³⁴⁷ OECD, The Role and Measurement of Quality in Competition Analysis, 2013.

³⁴⁸ Ibid, p. 5.

³⁴⁹ "Evidence regarding the role of quality in consumer choice can be complimented with an understanding of firm competitive strategy, particularly via internal documents. When firms are aware of the importance of certain aspects of quality to consumers, it can be particularly informative to observe whether they take these aspects into account in their competitive decisions." (OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018)

market. Hence, competition authorities need to identify which market features guide consumer choice, which may be both price and non-price parameters³⁵⁰.

197. The European Commission³⁵¹ has considered aspects such as innovation³⁵² and quality³⁵³ in many merger reviews, including in the digital sector, which resulted in interventions and deeper analyses to exhaust competition concerns³⁵⁴.

198. In addition, according to the OECD³⁵⁵, some digital markets may tend to be driven by non-price metrics. In these markets, consumers are more likely to consider qualitative metrics.

199. In its analysis of the advertising market, the CMA³⁵⁶ investigated which metrics users valued the most, covering both quantitative and qualitative metrics. The best-rating ones were

³⁵⁰ OECD, Handbook on Competition Policy in the Digital Age, 2022, p. 29 and OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018, p. 24. Also ibid, p. 37: "Considering price and non-price dimensions of competition can therefore require: (i) Determining the overall impact of price and non-price effects on consumer welfare, for example by attempting to quantify the value to consumers of a given non-price effect; (ii) Dealing with short- and long-term effects that have opposing impacts on consumer welfare ; (iii) Determining the weight to be given to qualitative evidence of a given non-price effect."

³⁵¹ European Commission - Commission Staff Working Document evaluation of procedural and jurisdictional aspects of EU merger control, 2016, p. 7.

³⁵² The recently updated FNE merger guidelines also cover the importance of innovation in the digital sector (op. cit., p. 29–30).

³⁵³ As the European Union indicated when adjudicating Case M COMP/M.6281, Microsoft/Skype (§ 81), in facing uncharged services, consumers tend to value qualitative metrics, which become a significant competitive parameter.

³⁵⁴ See for example the Commission decisions in cases: M.8788 – Apple/Shazam, 2018; M.8124 – Microsoft/LinkedIn, 2016; M.8084 – Bayer/Monsanto, 2018; M.7932 – Dow/DuPont, 2017; or M.7275 – Novartis/GSK Oncology Business, 2015

³⁵⁵ "Markets for products provided for free to consumers, as in some online services markets, may exhibit competition on quality, in the form of functionality, or even potentially privacy and the multi-sided nature of such markets should be taken into account. Similarly, markets with pricing regulation may offer firms limited opportunities to compete on price, and so quality or innovation may play a greater role. When consumers' demand exhibits a high degree of price elasticity, unilateral pricing effects of a merger may be more limited, and manifest themselves in different ways, such as a reduction in quality or innovation, since the loss of consumers that would result from a post-merger price increase may make such an increase unprofitable. Finally, markets with a high degree of product turnover, either in terms of product changes, the addition of functionality, or the introduction of new products that constitute completely different markets, likely involve substantial competition on innovation. While the industry in which the firms are situated may provide some initial indications, product turnover can provide a more concrete indication of the importance of innovation in a market." OECD, Considering nonprice effects in merger control – Background note by the Secretariat, 2018, p. 34.

³⁵⁶ "**Relevance of results** – the ability of a search engine to return useful, relevant results in response to a range of queries is a key dimension of quality. Activities such as crawling and indexing, developing additional features, and refining algorithms each play a role in search relevance.

Ease of use – consumers also want to be able to conduct their searches effectively and efficiently. Many search engines have built 'instant answer' boxes into the search results page, reducing the need for consumers to click through to other web pages. Features such as autocomplete and voice search also contribute to ease of use.

Attractiveness of interface – search engines also compete to provide visually attractive interfaces, which can be another aspect of quality from the perspective of consumers.

(i) relevance of results, (ii) ease of use, (iii) attractiveness of the interface, (iv) privacy and trust issues, and (v) quantitative price criteria such as promotional rewards, loyalty programmes, and other incentives. The authority noticed price-based criteria in the online advertising market were reported to be less valuable than qualitative criteria. It is worth mentioning the qualitative aspect of consumer privacy has been greatly discussed by authorities considering the possibility that, as a consequence of privacy erosion, dominant players conduct massive data processing, possibly violating privacy rules.

200. Despite these discussions, only a few merger reviews generated a debate on privacy. Specifically in the Microsoft/LinkedIn³⁵⁷ case, however, the European Commission understood user privacy is relevant to market competition, especially because of the extant privacy rules and its importance of the issue as reported by users themselves³⁵⁸. In its 2021 amended complaint in ongoing litigation against Facebook, the FTC alleges that increased concentration in a market may lead to lower levels of service quality in areas such as privacy and data protection³⁵⁹.

201. Nonetheless, the OECD points out that, in some situations, privacy issues may not be deemed relevant from the antitrust perspective, such as when consumers do not seem concerned with the consequences of sharing data with digital firms or when this sharing has no impact on the market³⁶⁰.

B) INNOVATION, KILL ZONES, AND KILLER ACQUISITIONS

Privacy and trust – privacy is important for some consumers; some consumers prefer to accept less personalised (and potentially less relevant) search results and adverts, in return for their search engine collecting and storing less data about their searches. Consumers may also trust particular brands.

Rewards and incentives for users – price is not a key parameter of competition in search; none of the general search engines that we heard from charge users or pay them for searches undertaken. However, some search engines compete for consumers' searches by offering nonmonetary rewards (such as promotional points that can be used to get discounts on other products), or by making contributions to good causes."

CMA, Competition and Markets Auth., Online platforms and digital advertising market study, 2020, p. 78. ³⁵⁷ European Commission Decision C(2016) 8404, Case M.8124 – Microsoft/LinkedIn, 6 December 2016.

³⁵⁸ "[Privacy] can be taken into account in the competition assessment to the extent that consumers see it as a significant factor of quality, and the merging parties compete with each other on this factor. In this instance, the Commission concluded that data privacy was an important parameter of competition." Press Release of December 6, 2016. Available at: <https://ec.europa.eu/commission/presscorner/detail/en/IP_16_4284>.

³⁵⁹ Available at: https://www.ftc.gov/legal-library/browse/cases-proceedings/191-0134-facebook-inc-ftc-v

202. Despite the importance of qualitative and quantitative criteria in merger reviews, it is important to consider competition in digital markets often takes the form of competition for innovation³⁶¹, being crucial to improve consumer welfare³⁶².

203. Due to the specificities of the digital sector, in which product differentiation is often paramount, digital markets often operate through disruptive innovation, that may allow for drastic changes in the competitive environment, the destabilisation of dominant positions and the increase of competition³⁶³.

204. Some reports³⁶⁴ indicate M&A initiated by incumbent firms can reduce innovation, both in the markets where they operate and in correlated ones. When dominant firms act to prevent innovation in their respective markets, they do so to protect their dominance and avoid becoming obsolete or irrelevant. In correlated markets, or in case the other market is highly profitable, this strategy can prevent the development of a competitor that could affect the incumbent's operation³⁶⁵.

205. On the last point, one can notice that—be it to protect their dominance or to enter a highly profitable market—dominant digital firms have sought to acquire many companies that were yet to become an effective market competitor. The rise of these new companies could be hindered since incumbent companies might have had access to market data.

206. According to the House Majority Report, data allows dominant companies to have a greater understanding of user engagement and preferences. Moreover, it allows them to more quickly identify and explore new business opportunities³⁶⁶ and to detect and purchase

³⁶¹ Non-price competition between digital platforms can involve a broad range of competitive parameters, including innovation, as mentioned by the CMA. The importance of innovation was discussed in the following cases: Anticipated acquisition by Microsoft Corporation of Nuance Communications, Inc' (Microsoft/Nuance) (31 March 2022); Anticipated acquisition by Facebook, Inc. of Kustomer, Inc.' (Facebook/Kustomer) (9 November 2021); Anticipated acquisition by Amazon of a minority share and certain rights in Deliveroo' (Amazon/Deliveroo) (4 August 2020).

³⁶² Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report, In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 36

³⁶³ "Technological developments may weaken switching costs as they may lead to periods of intense innovation and businesses responding to technological changes, which can be destabilising to established market power." (OECD, Rethinking Antitrust Tools for Multi-Sided Platforms, 2018, p. 78)

³⁶⁴ Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report, In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 78.

³⁶⁵ Administrative Council for Economic Defense. Working Paper no. 05/2020 Concorrência em Mercados Digitais: uma revisão dos relatórios especializados, 2020, p. 41.

³⁶⁶ Online Platforms and Market Power, Part 1: The Free and Diverse Press: Hearing Before the Subcomm. on Antitrust, Commercial and Admin. Law of the H. Comm. on the Judiciary, 116th Cong. (1–3, 2019).

emerging companies that could become effective rivals, which reduces competition and innovation³⁶⁷ and gives rise to digital ecosystems.

207. It is worth mentioning the creation or maintenance of market power by incumbent firms, especially through the creation of digital ecosystems, tends to slow down the pace of innovation³⁶⁸ and bringing about the so-called kill zones³⁶⁹. In these cases, the dominant firm can purchase a rival, diverting and absorbing the demand in that market, and ultimately stifle innovation by cannibalising the products once produced by the acquired company.

208. This potential cannibalisation has caused merging companies to adopt one of the two strategies, namely (i) to continue developing new products, along with the product line already developed by the companies or (ii) not to develop new products or place them in the market³⁷⁰. In the last case, the harm to consumer welfare is much greater, and the theory of harm associated to its effect is similar to that of unilateral effects³⁷¹.

209. Then, reduced innovation might create a new vicious cycle for the consumer and a virtuous cycle for dominant firms³⁷². This is because there is a direct relationship between the interest in innovating and investments in R&D. The lower the investment, the lower the degree of innovation in the market, which, in turn, restrains new entrants and strengthens market dominance³⁷³.

³⁶⁷ U.S. Subcommittee On Antitrust Comercial And Administrative Law Of The Comittee On The Judiciary. Investigation of Competition in Digital Markets. Majority Staff Report and Recommendations, 2020. p. 42–45.

³⁶⁸ As pointed out by AUSTRALIA in response to the form and the Stigler Report (2019), p. 74.

³⁶⁹ Kill zones are markets that, in spite of a significant potential for profit, cannot attract investment, especially from venture capital, considering the existence of dominant firms in adjacent markets or the market itself. (Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report, In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 74–76).

³⁷⁰ The merged firm could in some cases coordinate the introduction of new products alongside the established product lines of the pre-merger firms. For example, a firm's new and existing products could be repositioned to minimise any sales cannibalisation between them. This could allow a post-merger firm to protect its margins in a manner that would not have been possible prior to the merger. Thus, a firm's innovation incentives would be preserved, but the overall impact on consumer welfare would depend on the effects of the product repositioning. OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018, p. 6–7.

³⁷¹ The theory of harm associated with the impact of an anticompetitive merger on product positioning is relatively simple: unilateral effects may arise, allowing firms to reduce variety in a post-merger product offering, and avoid introducing future variety. Thus, a firm could reduce its costs, and prevent the cannibalisation of sales due to within- firm competition, by cutting variety below the competitive level. Vertical mergers could also have an effect on variety by enabling exclusionary conduct (*Ibid*, p. 23)

³⁷² Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report, In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 76; Digital Competition Expert Panel, Unlocking Digital Competition: Report Of The Digital Competition Expert Panel, 2019, p. 37; Portuguese Autoridade Da Concorrencia, Ecossistemas Digitais, Big Data E Algoritmos, 2019, p. 39–40.

³⁷³ The US Horizontal Merger Guidelines indicate: "Enhanced market power can also be manifested in non-price terms and conditions that adversely affect consumers, including reduced product quality, reduced product variety,

210. This is because, from a rational perspective, smaller firms will choose not to invest in innovation as the dominant firm will absorb the invested money at a lower marginal cost. Aware of this, the Chilean³⁷⁴ authority, amongst others, have adapted their merger guidelines to address the impact of innovation³⁷⁵, especially regarding digital markets, where qualitative criteria are more relevant.

211. However, there are some clear difficulties inherent to prognostic assessments based on uncertain future elements³⁷⁶. It is difficult for authorities to anticipate the still unrealised possibility of innovation. Nevertheless, ignoring this phenomenon may lead to approving mergers that ultimately might harm consumer welfare.

212. Despite any problems related to traditional indirect metrics for market power, many reports suggest authorities need to develop a more dynamic approach to analyse competition, rather than seeing it a static condition given by players' positions in relevant markets. A dynamic approach based on resources and capacity may prove useful in understanding the competitive advantages explored by digital platforms. Special attention should be paid particularly to the way in which players compete for skills and capital (both human and productive) in other segments of the market in order to create new products³⁷⁷.

reduced service, or diminished innovation. Such non-price effects may coexist with price effects, or can arise in their absence (...) The agencies therefore also consider wheter a merger will dimmish innovation competition by combining two of a very small number of firms with the strongest capabilities to successfully innovate in a specific direction".

The European Commission Horizontal Merger Guidelines indicate: "Through its control of mergers, the Commission prevents mergers that would be likely to deprive consumers of these benefits by significantly increasing the market power of firms. By 'increased market power' is meant the ability of one or more firms to profitably increase prices, reduce output, choice or quality of goods and services, diminish innovation, or otherwise influence parameters of competition."

³⁷⁴ In this regard, the Chilean authority indicates that, in digital markets, "innovation is relevant to compete, the existing competitive conditions do not necessarily constitute a good counterfactual to evaluate the possible effects of a Transaction, since the structure of the markets is still developing and may evolve, in the short or medium term, towards scenarios different from those observed when examining the competitive impact of the Transaction. This could occur, for example, when in an affected market there are processes of 'disruptive innovation', scenarios in which an important part of the competition is 'for-the-market' and not 'in-the-market'. In other words, this is a competitive process where undertakings strive to create an innovation that is then preferred by consumers and has the ability to displace other competitors".

³⁷⁵ The following jurisdictions consider innovation as one of the main variables for the digital market: Belgium, Brazil, Chile, the CMA, the European Commission, Kenya, Serbia, Spain, and Slovenia.

³⁷⁶ FNE, op. cit., p. 29.

³⁷⁷ This assessment may regard (i) data and data analytics technologies, (ii) hired professionals, and (iii) funding. OECD, Data-Driven Innovation: Big Data for Growth and Well-Being, 2015, p. 254–260. The US House of Representatives (op. cit, p. 46–47) highlighted the massive reduction in the number of startups at an early funding stage.

213. Authorities usually suggest using direct evidence^{378_379} to verify which new projects and products are being developed or researched by the acquired company^{380_381}. The OECD³⁸² also states that, in assessing the potential for innovation, authorities can use internal documents to analyse currently developed studies, which helps to determine whether projects under development in each company overlap.

214. Direct evidence can refer to materials produced by companies and the market, such as—but not limited to—submission forms, strategic documents, articles, industrial publications, investment reports, and even marketing documents. These documents can indicate the importance of innovation for merging companies. Moreover, consumers and competitors can be officially required to present³⁸³ information and their perspectives on innovation in the market^{384_385}.

215. Therefore, the analysis aims to identify which players compete for innovation, the stage of development and degree of overlap between their products, and how the products

³⁷⁸ **SPAIN** - In general the CNMC uses the parties' internal documents to look into the relevance of innovation in a given market and into the players they consider that pose competitive constraints. Within these documents those that have been prepared before the transaction could be of particular relevance. Other public documents (reports by third parties etc.) regarding the affected markets could be relevant in order to understand the relevant competition parameters (and the significance of innovation etc.) and the competitive landscape. In certain cases the CNMC also conducts market tests to gather the views of third parties which would include actual and potential competitors, clients and suppliers.

³⁷⁹ **COLOMBIA** - The SIC considers stronger evidence to be proof that in the short term the competitor is going to enter the market (such as business plans, investments already made to enter the market, among others), in contrast to the simple statement that they are interested in entering the market.

³⁸⁰ The CMA conducted this analysis for the Amazon/Deliveroo merger review: "34. We have taken into account a range of evidence, including evidence of the way that Amazon operates its business in practice (and in particular its so-called 'test and learn' approach to innovating and expanding its product offerings). Available at the CMA's Phase 2 Final Report. (Anticipated acquisition by Amazon of a minority share and certain rights in Deliveroo (Amazon/Deliveroo) (4 August 2020)).

³⁸¹ **SPAIN** - In general the CNMC uses the parties' internal documents to look into the relevance of innovation in a given market and into the players they consider that pose competitive constraints. Within these documents those that have been prepared before the transaction could be of particular relevance. Other public documents (reports by third parties etc.) regarding the affected markets could be relevant in order to understand the relevant competition parameters (and the significance of innovation etc.) and the competitive landscape. In certain cases the CNMC also conducts market tests to gather the views of third parties which would include actual and potential competitors, clients and suppliers.

³⁸² OECD Handbook on Competition Policy in the Digital Age, 2022, p. 34

³⁸³ "Surveys can establish the degree to which consumers exhibit heterogeneous preferences, and therefore whether variety may be an important aspect of competition in the market. Specifically, consumer research can be helpful to determine whether product differentiation is vertical (pointing to the existence of a price/quality spectrum) or horizontal (in which case multiple dimensions of quality and price will need to be considered), and whether consumers can be subcategorised based on their quality preferences." (OECD, Considering non-price effects in merger control – Background note by the Secretariat, 2018, p. 25)

³⁸⁴ **JAPAN** - "As to sources of evidence, hearing/interview to competitors/consumers/third-parties and hot-documents of the parties would be important sources."

³⁸⁵ *Ibid*, p. 13.

exert competitive pressure on the merging parties. If it becomes clear that competition is essential for innovation, authorities will be able to address theories of harm regarding how innovation has been or could be stifled by the merger^{386_387}.

216. The European Commission developed an analytical framework, which covers actual competition, potential competition as well as innovation:

- a. Actual (product and price) competition. The European Commission assesses overlaps between marketed products;
- b. Potential (product and price) competition. The European Commission assesses overlaps involving advanced-stage pipeline products (which can overlap either with a marketed product or another pipeline product);
- c. Innovation competition at product level. The European Commission assesses overlaps between pipeline products, including early stage pipelines. At this level of the analysis, the Commission assesses whether the merger could change the incentives of the combined entity to invest in parallel R&D programs and if there is a risk that one of the pipelines could be discontinued, delayed or re-oriented as a result of the transaction. The Commission raised concerns in that respect in certain pharmaceutical cases including M. 9461 -AbbVie/Allergan.
- d. Innovation competition at a broader level. The Commission assesses the capability of the companies to innovate in certain wider fields and whether the transaction could lead to the elimination of an important innovator or whether there is a risk of a structural reduction of the overall level of innovation in certain fields. The Commission for instance raised concerns in that respect in M.7932 Dow / Dupont, in relation to innovation in the field of pesticides.

217. The OECD³⁸⁸ has introduced other ways of assessing the effects of a transaction on the innovation process: (i) to determine whether a market is an "innovation market"³⁸⁹; (ii) to

³⁸⁶ The Spanish authority mentioned the need for assessing these theories of harm, especially in mergers of potential competitors. (CNMC no ICN MWG - Digital Mergers - Webinar 1: Market Definition

³⁸⁷ "Specifically, the threat of rival innovation may spur firms to engage in innovation, and so with the elimination of a rival, a merged firm may have fewer incentives to innovate than before, as well as the ability to reduce its innovation efforts without fear of consequences." Ibid, p. 8–9

³⁸⁸ *Ibid*, p. 10–11.

³⁸⁹ According to the OECD, a static definition, considering only the goods or services currently supplied, may not properly reflect competition for innovation. Chile defends the same position in its reply to the questionnaire, stating that *"in markets where competitive conditions are prominently dynamic in nature, whether characterized by disruptive or incremental innovations, the market structure observed during the pre-transaction period may not be a good counterfactual. A preferable approach will be to assess the competitive position of other market players to develop innovations and the closeness of competition of the parties to the transaction with respect to the development of potentially competing*

investigate whether the transaction can be a Significant Impediment to Industry Innovation (SIII); (iii) to analyse if the merger impacts incentives and the ability of firms to innovate.

218. The OECD also suggest authorities go through a five-step innovation assessment during merger reviews:

- (i) determining where the merging firms' innovation efforts overlap;
- (ii) identifying competing innovation efforts (including R&D substitution by firms with relevant R&D capacity that does not currently overlap with the R&D efforts of the merging firms³⁹⁰);
- (iii) evaluating competition (including potential competition) in the product market associated with the innovation efforts;
- (iv) defining a market using a small but significant non-transitory reduction in innovation efforts, and determining whether the merged firm would be able to reduce overall innovation effort in the market by virtue of its position;
- (v) assessing merger efficiencies that benefit innovation efforts.

219. Finally, the OECD suggests that authorities also check if the transaction could impact companies' incentives to innovate and their ability to do so. Also, the organisation warns authorities to operate under a presumption of neutrality when assessing these transactions, analysing them case by case.

220. In the same context, authorities should evaluate transactions' potential effects on innovation as to the market and the merging parties alike. The degree to which companies in a market innovate, and whether their innovation efforts overlap, will also determine a merger's impact on the overall innovation of a market. For instance, there could be structural barriers limiting the number of companies actively engaged in innovation, in which case a merger between two innovative firms could be a source of concern.

221. This analysis, however, is not trivial. Determining the existence of entry barriers caused by the innovation process may pose a challenge to authorities since innovation can

innovations". Horizontal FNE's Merger Guidelines, Paragraph 92. "In digital markets the FNE will analyze in greater detail the competitive effects in the markets when an undertaking can eliminate potential competitors or recent entrants that could challenge its competitive position in the market." FNE's Horizontal Merger Guidelines, Paragraph 105.

³⁹⁰ As already mentioned, qualitative criteria may not produce the same accuracy as traditional or price-based criteria; moreover, they reveal other serious limitations. As to R&D, "total spending on R&D is an attractive approach in terms of data availability and ease of comparison. It can also be put in the context of the size of the firm with the calculation of R&D intensity, or total R&D spending per unit of revenue. This can help separate firms with similar levels of sales based on the effort they put into R&D." (Ibid, p. 16).

emerge in a disruptive manner, significantly affecting competitive dynamics³⁹¹. Although difficult, this assessment is crucial for digital markets due to particularities that promote winner-takes-all markets. These concerns are aggravated when multiple transactions in the digital sector have been conducted without notifying the authorities³⁹².

222. Entrants play a crucial, disruptive role in digital markets. Being acquired not only means a firm will be removed from the market. It also means a potential competitor is being eliminated. This phenomenon is called a *killer acquisition*^{393_394} and is assessed by a theory of harm that considers the lost competition caused by the acquisition of a potential rival³⁹⁵.

³⁹⁵ **AUSTRALIA** - The ACCC previously noted in its Digital Platform Inquiry Final Report (2019) that the acquisition by an incumbent firm of smaller innovative companies (often active in closely connected markets), discontinuing the target's innovative projects and eliminating potential future rivals can be part of a "killer acquisition strategy". The ACCC has also noted that the prospect of disruptive entry can be important and in many cases the most significant constraint on large digital platforms. Digital platforms with substantial market power can therefore have strong commercial incentives to acquire nascent rivals. (See Australian Competition And Consumer Commission, Digital Platforms Inquiry–Final Report, 2019, p. 75; OECD, The Evolving Concept of Market Power in the Digital Economy, OECD Competition Policy Roundtable Background Note, 2022, pp. 10–11.)

³⁹¹ "Evaluating the existence of such barriers can be challenging for competition authorities, since disruptive innovations may appear without warning, from completely new market players, and assessing whether a market is ripe for such disruption is not straightforward. On the other hand, firms may choose to focus their innovation efforts on different areas, or opt not to undertake innovation at all, preferring for example to free ride off their rivals' efforts. Thus, product market competition may not always correlate with competition to develop a given innovation, and mergers between product market competitors may have a limited impact on innovation incentives." Ibid, p. 8–9

³⁹² "The U.S. House Of Representatives, for example, affirms that digital platforms constantly acquire upstart competitors that are often data-rich but cash poor, a combination that allows them to evade antitrust scrutiny." (op. cit., p. 44)

³⁹³ EUROPEAN COMMISSION - The term "killer acquisitions" refers to acquisitions, typically by large companies, of companies which, thanks to their innovative products and services, could, absent the transaction, develop into a significant competitive threat in order to protect the buyer's existing market position. In the Commission's experience, the issue in digital markets is often rather that of "early acquisitions" solving the buyer's "buying vs building" dilemma (i.e. the acquisition of targets in order to acquire a ready-to-market, innovative product and integrate it in the acquirer's ecosystem, rather than investing in the development of such product from zero). These type of acquisitions lend themselves to non-horizontal theories of harm which relate to the complementarities between the acquirer's products or ecosystem and the target's business, whereas "killer acquisitions" would be more horizontal in nature and would concern the acquisition of a company in order to prevent its market growth. ³⁹⁴ KENYA - Killer acquisitions happen when a dominant firm proposes to acquire a potential competitor. The Authority regards these mergers as having similar anti-competitive effects to two undertakings that are already active in the market; hence their potential to significantly impede effective competition through the creation or strengthening of a dominant position. Therefore, such mergers are subjected to in-depth merger assessment even if they lie below notification thresholds. A merger with a potential competitor can generate horizontal anticompetitive effects, whether coordinated or non-coordinated, if the potential competitor significantly constrains the behaviour of the undertakings active in the market. This is the case if the potential competitor possesses assets that could easily be used to enter the market without incurring significant sunk costs. Anti-competitive effects may also occur where the merging partner is very likely to incur the necessary sunk costs to enter the market in a relatively short period after which this company would constrain the behaviour of the undertakings currently active in the market. For a merger with a potential competitor to have significant anti-competitive effects, two basic conditions must be fulfilled. First, the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force. Evidence that a potential competitor has plans to enter a market in a significant way could help the Authority to reach such a conclusion. Second, there must not be a sufficient number of other potential competitors, which could maintain sufficient competitive pressure after the merger.

223. However, analysing the effects of such a transaction on potential competition³⁹⁶ is a challenge due to the uncertainties of digital markets. This type of acquisition may have an ambiguous effect: on the one hand, they can be pro-competitive by introducing new products or goods into the ecosystem³⁹⁷; on the other hand, they contribute to the discontinuation of innovative products by eliminating a potential rival^{398_399}.

224. In an uncertain scenario involving dynamics of innovation—and especially digital markets— studies suggest authorities must balance the risks of mistakenly intervening with those of not intervening when there is a credible risk of competition harm^{400_401}. In innovative markets, merger analysis must focus on the likelihood of new competitors entering the market after the transaction was cleared.

225. In its reply to the questionnaire, the CMA submitted it might consider a wide range of evidence as to the potential market entry of merging companies, especially in the digital sector. This entry is more likely to happen when a merging company has the incentive and ability to enter the market; has robust plans or has taken significant steps to enter the market; where established companies have been anticipating the company's entry; or where it has a record of entering similar markets. On the other hand, the Norwegian and Brazilian authority indicated that, to consider an entry to be likely to mitigate competition concerns, it should be probable, timely, and sufficient.

³⁹⁶ Turkey, for instance, emphasised that potential competition might be more relevant in markets with constrained competition: "Potential competition is more important in those markets where market competition is restricted due to various reasons, such as intellectual property rights or the presence of network effects. Thus, mergers in markets that develop through innovation where multi-lateral platforms are active and significant network effects are present can potentially have a restrictive effect on competition."

³⁹⁷ European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 117–120 e Digital Competition Expert Panel, Unlocking Digital Competition: Report Of The Digital Competition Expert Panel, 2019, p. 93

³⁹⁸ Brazil, CADE. Cadernos do CADE: Mercados de Plataformas Digitais, 2020., p. 10.

³⁹⁹ Ibid, p. 88, 89

⁴⁰⁰ OECD, Executive Summary of the Hearing on Competition Economics of Digital Ecosystems, 2020 -"Investigating the acquisition of nascent competitors can be particularly challenging given the uncertainties involved. While these questions involve substantial uncertainty, authorities must balance this challenge with the risks of not intervening in markets with a credible risk of competition harm. Established assessment frameworks remain relevant, and certain types of evidence, including internal documents, may be particularly helpful."

⁴⁰¹ A cautious perspective holds that authorities should review mergers regardless of notification thresholds whenever "(*i*) there is a pattern of recurrent acquisitions of startups by incumbents in a given sector; or (*ii*) the high price of the transaction indicates that the incumbent is sharing monopoly profits with the acquired company" (Stigler Comm. On Digital Platforms, Sub-Committee On Market Structure And Antitrust Report (In Stigler Committee On Digital Platforms Final Report, Stigler Ctr. For The Study Of The Econ. And The State At Chicago Booth 23, 2019, p. 88– 89). Other reports stress that, although killer acquisitions represent a concern, most transactions aim to strengthen the ecosystem, consequently incorporating developments rather than foreclosing competitors(European Commission, Competition Policy for Digital Era, A report by Jacques Crémer, Yves-Alexandre de Montjoye Heike Schweitzer, 2019, p. 93).

226. The European Commission has stated its potential competition analysis includes assessing the likelihood of a potential competitor entering the market, the risks and costs associated with it, existing entry barriers, and others⁴⁰².

227. As to the metrics adopted in this analysis, and following the European Commission, several authorities responded that it is important to determine (i) the possibility of entering the market without incurring considerable costs and having the necessary means for that, and (ii) the possibility of bearing the costs to enter within a short time. Some competition authorities mentioned they could use both metrics⁴⁰³ while others said to adopt other criteria⁴⁰⁴.

228. Due to these difficulties, mainly in spotting potential competitors, authorities were questioned about how they assess possible competition in markets marked by innovation and which metrics they use.

229. The authorities from Belgium, Germany, Hungary, Norway, Taiwan, and the European Commission stated the definition does not differ from traditional markets⁴⁰⁵. Other authorities mentioned other criteria to assess potential rivals in digital markets, such as the

⁴⁰² The EU Commission indicated that when assessing a merger between a company and a potential competitor in the same market, in practice, it assesses in particular the potential competitor's likelihood of entry. Criteria to assess such likelihood may include the profitability of entry, the existence of high risks and/or costs associated with entry, or entry barriers (legal or technical advantages, difficult access to inputs, and/or entrenched position of incumbent companies, etc.). As such, concrete entry plans may be particularly relevant to establish the likelihood of entry. For instance, in M.7217 – Facebook / WhatsApp, the Commission concluded that there was no potential competition in relation to social networking services between Facebook and WhatsApp, due to the lack of plans by WhatsApp to become a social network. The decision reads that: "As regards the first claim concerning potential competition, the *Commission collected and assessed relevant evidence*, [...]. No indication was found of WhatsApp has traditionally been on offering a light and simple communications service on smartphones only".

⁴⁰³ Belgium, Brazil, Chile, Colombia, Hungary, Kenya, Serbia, Spain, Slovenia, Sweden and Turkey.

⁴⁰⁴ Spain mentioned considering potential competition only when market entry is reasonable and economically feasible, not being sufficient that a player has the resources to invest. The Hungarian authority also stated that "entry must be likely, needs to be able to take place in a short amount of time after a potential price increase, and needs to be strong enough in order to counterbalance the potential anticompetitive effects of the merger. The incentives to enter a market should also be worth investigating, and also the viability of the potential entry should be assessed". Additionally, Chile stressed it "will evaluate the evidence to determine whether in the case of the transaction not occurring, there would have been an entry or expansion in the market that exerted a competitive pressure to the market that would be lost with the transaction". Bulgaria and Lithuania chose not to answer as they have no significant experience with the sector.

⁴⁰⁵ **BELGIUM** - "Not different from approach in other markets: look at possibilities and incentives of current players / potential entrants. Entry/growth barriers, financial options, necessary scale to be profitable" .;

EUROPEAN COMMISSION - "The Commission defines potential competition similarly across all sectors, including in digital markets. Potential competition is the competition exerted by undertakings which are not currently active in the same product and/or geographic markets as the undertaking(s) under investigation".

existence of better products⁴⁰⁶, the probability of becoming a future rival (based on the characteristics of the affected market)⁴⁰⁷, the current and prospective characteristics of the market^{408_409} and the level of competitive pressure on the acquiring company⁴¹⁰.

230. In conclusion, assessing merger effects on innovative markets and potential competition is not a trivial task, but it supports competition authorities in adopting measures to assess competition dynamics. Consequently, new metrics may be needed for merger control, especially concerning mergers in digital markets.

VI) CONCLUSION

231. In 2020, as co-chair of the ICN Merger Working Group (MWG), the Administrative Council for Economic Defense (CADE) proposed a project within the scope of the 2020-2023 work plan⁴¹¹ for the biennium 2021-2022. The project consisted mainly of a survey that compares and reports the main issues the competition authorities have dealt with regarding the correlation of data control, market power, and potential competition in merger reviews.

⁴⁰⁶ **AUSTRALIA** - "The ACCC considers that potential competition can include nascent or potential rivals, new business models or from businesses with a service that is substantially superior to the services offered by the incumbent".

⁴⁰⁷ **CHILE** - "To assess the competitive pressure that could be exerted by a potential competitor or a recent entrant in the market, the FNE will first consider the likelihood that the undertaking would have become an effective competitor. The FNE will weigh the evidence that demonstrate that such undertaking would have entered the market or expanded its operations in the absence of the Transaction. If the foregoing is proved, the FNE will analyze the competitive behavior that the relevant undertaking would have had with its entry or expansion. Then, the FNE will consider whether the loss of competitive pressure that the Transaction would produce could be sufficiently outweighed by the repositioning or rearrangement of other players that would be able to exert a competitive pressure comparable to the one that the undertaking would have exerted in the market. This approach was used in "Adquisición de Cornershop por parte de Uber Technologies, Inc." ("Uber/Cornershop")".

⁴⁰⁸ **TURKEY** - "When conducting potential competition analyses, the first step must be to assess whether market entry is profitable, and therefore likely, in consideration of how the market will be shaped in the future, economies of scale, product differentiation, and access to scarce resources. The likelihood of the potential competitor becoming an effective competitive power, the size of the potential competitor, and the timeframe in which it is expected to enter the relevant market must be examined in order to assess the level of potential competition that is likely to be lost".

⁴⁰⁹ **SWEDEN** - "As digital markets are fast-moving and dynamic it is important to take into account both current and future developments in order to define potential competition. As digital markets are especially prone to innovation, potential future products may be an important constraint on firm's behaviour even though the product has not been realized yet. For example, the SCA may consider if other firms are in the process of developing new or related services that could be in competition with an incumbent firm in the future. It may use internal strategy documents to analyse this. The SCA may also consider the presence and strength of certain characteristics of the digital market, such as network effects, multihoming, economies of scale and the use of large quantities of data in order to conclude whether there are significant barriers of entry which in turn affect whether the threat of potential competition constraints the actions of the firms on the market".

⁴¹⁰ **SPAIN** - In general terms a distinction is made between those players that are in the relevant market (or could easily, promptly and economically enter it) and those that are potential competitors. The difference lies in the degree of competitive pressure that they exert and how immediate this pressure is. A potential competitor will typically exert competitive pressure but the constraint will be less immediate. As such, if within the same kind of suppliers only some of them could effectively and timely enter the market they will generally be considered potential competitors.

⁴¹¹ Available at: https://www.internationalcompetitionnetwork.org/wp-content/uploads/2020/09/Workplan2020-23MWG.pdf>.

232. As part of the project, the Merger Working Group collected information on the experience of ICN members in evaluating data control, market power, and potential competition in merger reviews in digital markets. The data was gathered from a questionnaire distributed to 70 competition authorities, which was responded to by 22 of them⁴¹².

233. Despite the large amount of valuable information made available by the respondent authorities, the study also sought to collect independent documents and reports published by competition authorities, international bodies, and non-governmental entities, among others⁴¹³.

234. For this very reason, the purpose of this report was not to present definite conclusions on how to deal with mergers and acquisitions, but to present the main concerns, discussions, and problems faced by competition authorities with those transactions in digital markets.

235. In this context, this report investigated, in Chapter III, the main characteristics of digital markets, with concepts such as (i) economy of scale and scope; (ii) scale without mass; (iii) massive data accumulation; (iv) the existence of conglomerate markets or digital ecosystems; (v) network effects; (vi) switching costs; (vii) *"winner takes all"* or *"winner takes most"* market dynamics (viii) among others, which are common to this type of market.

236. By studying those concepts, it was possible to identify the main competitive concerns arising from digital markets. Digital mergers have a dual effect: on the one hand, they can generate efficiencies, allowing the instant exchange of communication, obtaining more personalized services, among others; on the other hand, they can also raise a series of competitive concerns.

237. Within the scope of this report, i.e., the correlation of data control, market power, and potential competition in merger analysis, we could find several competitive concerns that specifically pertain to transactions in digital markets.

238. The first of these concerns refers to the absence of notification to competition authorities of mergers in digital markets. Undernotification stems, to a large extent, from the fact that most authorities establish turnover thresholds for the acquired and acquiring parties as objective requirements for the notification of mergers.

239. Given that many nascent technology companies are startups with low to no turnover, it was found that a significant number of transactions were not reported to competition

⁴¹² Respondent authorities: Australia, Belgium, Brazil, Bulgaria, Canada, Chile, Colombia, the European Union, Germany, Hungary, Japan, Kenya, Lithuania, Mexico, Norway, Serbia, Slovenia, Spain, Sweden, Taiwan, Turkey, and the United Kingdom.

⁴¹³ The documents consulted and respective links were made available on pages 2 to 7 of this report.

authorities. As a result, some legislators have begun to question the suitability of objective parameters, such as turnover thresholds for mergers, to request the submission of mergers in the digital economy. This report showed how some jurisdictions, such as Germany and Austria have started trying to address this problem by imposing new criteria for notification.

240. However, it is still not clear whether these changes effectively allow to identify transactions with additional competitive concern and there is also no consensus about whether changing the existing parameters or lowering thresholds would be the appropriate response. In addition, there is also great difficulty in defining the appropriate parameters to address such a problem.

241. In this sense, the establishment of ex-post rules for the assessment of mergers involving the digital sector may be a valuable element, even when the formal criteria for notifying transactions have not been met.

242. The second concern expressed by competition authorities refers to a need to deepen the competition analysis undertaken by authorities, as well as to develop new tools to deal with economies that move in a fast, dynamic, and innovative way. In order to identify the difficulties experienced by the authorities in dealing with these transactions, this report has sought to summarize the discussion based on analysis undertaken by competitive authorities, that is, the adequate definition of the relevant market involved and the appropriate measurement of the market power of the merging parties.

243. Given the specificities that underlie different digital markets, whose characteristics might encourage anticompetitive practices, we have sought to verify which characteristics are likely to foster those practices. It is for no other reason that many reports have suggested establishing rebuttable presumptions aimed at strengthening analytical standards, going as far as establishing the presumption that all operations involving certain agents of the digital sector may be considered anticompetitive *per se*.

244. In addition, other reports and authorities have suggested that the presumptions be aimed at those elements that tend to encourage anticompetitive practices in digital markets. In this context, it became clear that some elements that characterize these markets, such as (i) direct and indirect network effects; (ii) multi-homing and single homing; (iii) low marginal costs linked to economies of scale and scope; (iv) the massive accumulation of data; and (v) the formation of digital ecosystems, have raised concerns on the part of competition authorities.

245. While there are competitive concerns linked to these characteristics, many of them have the power to maximize the efficiency of products, increasing the well-being of society, with better products and services being offered to consumers.

246. However, when discussing how to strengthen analytical standards, many authorities have stated that current tools - largely based on quantitative tools that take into account inventories, prices, among others - do not seem to be adequate to deal with some mergers in digital markets. In this context, many reports and authorities indicate that it may be necessary to use qualitative tools, considering other competitive dimensions that may prove to be more relevant to some digital markets.

247. One proposed metric refers to the massive accumulation of data by the platforms and how this can be an indication of dominance. Even though other sectors of the economy may accumulate data, the digital economy has revolutionized the market by allowing economic agents to process an extremely large amount of data almost instantaneously.

248. Data is a central discussion in digital markets. As recognized by several authorities and reports, the possibility of digital firms instantly collecting and processing a considerable amount of data has changed reality drastically, affected competition, and intensified issues related to consumer privacy. However, it is not any data in any market that may raise competitive concerns. In some markets, data could be neutral for competitive analysis. In this sense, it seems to be a consensus that the competitive analysis involving data must consider and differentiate the types of data and their implications for market competition, considering data heterogeneity, dimensions, use cases, typology, data access conditions, and levels.

249. It is also important to recognize that despite the possibility of feedback loops and data reinforcement be seen as an anticompetitive advantage, the more data is gathered about a certain individual and group of individuals, the better the user experience within a platform can be if the platform is able to process them in order to offer the user a more customized experience, better suited to their preferences. The better the consumer experience, the more consumers will be attracted to the platform, increasing its database and a potential supply of more personalized products.

250. In addition, this study also identified another qualitative metric that has been widely suggested by competition authorities and reports: the greater need to analyze competition from the point of view of companies' innovative processes. This is because, since the digital sector is characterized by disruptive innovation, in addition to a massive accumulation of data by its agents, there have been multiple discussions about mergers whose only purpose was to acquire a future, potential competitor. Such operations may generate spaces where other players have no interest in investing, given the imminent risk of an incumbent company from

another segment moving into that market. This process may happen either organically, if the incumbent operates in a related market, or artificially, through the acquisition of a (potential) competitor.

251. In this context, authorities suggest using not only quantitative criteria, but also direct evidence of the market power of agents, which can be inferred from a series of criteria not based on price. Several methodologies have been identified and explained throughout this report.

252. Finally, this report found some consensus on the need to develop new tools to deal with some mergers in digital markets such as conglomerate operations, which lead to the formation of digital ecosystems and raise specific concerns.

253. However, it is necessary – and here there also seems to be some consensus – that the authorities conduct case-by-case analyses of mergers, be they notified or analyzed *ex-post*. Operations in digital markets may contain elements that can only be accessed through a thorough analysis of the affected markets, in addition to other elements that may mitigate competitive concerns, even when in the presence of several characteristics that might encourage anticompetitive practices.

254. In short, this report summarized the main discussions, concerns, and suggestions that have been presented by the authorities and *experts* on the subject, as well as best practices and challenges the authorities have identified in dealing with mergers in digital markets.

